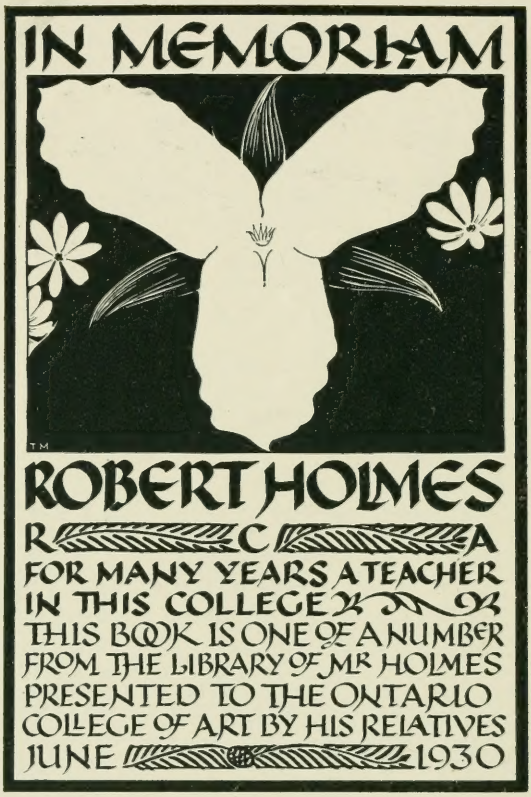
NATURE DRAWING
FROM VARIOUS POINTS OF VIEW

EDITED BY
HENRY TURNER BAILEY


IN MEMORIAM
ROBERT HOLMES
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IN THIS COLLEGE
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EDITED BY

HENRY TURNER BAILEY

EDITOR OF "THE SCHOOL ARTS BOOK," "THE FLUSH OF THE DAWN," "THE CITY OF REFUGE"

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PREFACE

With one exception the papers here brought together were written originally for The School Arts Book, and published in that magazine during its first eight years.

The names of the authors will be found in the table of contents. Each author presents his own point of view, but all are in substantial agreement as to the importance of Nature Drawing, and as to the method to be pursued in securing good results.

These collected papers constitute a handbook for teachers, and a guide to the lover of the wayside things, who would know them better, and find in their beauty the elements of beautiful decoration.

THE EDITOR.

A child's water color drawing in flat tones,
from the red clover.

CHAPTER I

NATURE DRAWING*

THE power to draw directly from the object is of such great importance that any course of instruction which fails to develop it can hardly be called successful.

The power develops through constant practice under guidance. The objects which seem best adapted to the needs of beginners in the art of delineation are the common plants: first, because they are everywhere available; second, because they present the problems of graphic representation in their simplest form; third, because children like them and therefore draw from them with enthusiasm.

The simplest plant may be studied from several points of view. The observer may think of its lines of growth, its pose or gesture, of the character and distribution of its parts as seen in silhouette, of the contours and foreshortenings of its parts as interpreted in line, of the colors of the parts, and their relative values when rendered in black and white, of the anatomical structure of the plant, of the texture of its parts—roughness of stem, gloss of leaf, glow of petal, of the grace and harmony of the whole growing in its habitat beneath the play of sunlight and shadow. It is therefore folly to place even the simplest plant before a child with the command, "Draw what you see." The child must be led to see as well as to draw, to see a few facts at a time and to represent these facts in the simplest way.

The course he should follow will be determined partly by the needs of the draftsman and partly by the conditions imposed by his developing powers.

Such a course may be outlined briefly and illustrated as follows:†

* An address by Henry T. Bailey at the Third International Art Congress, London, 1908.

† Numerous blackboard sketches were made in line and in color to elucidate each of these topics.

1. A study of the character and movement of growth as expressed in line, and of the color of the parts as expressed in typical hues.

Even the youngest pupil may be led to see whether the main lines of a plant are straight or curved, and whether they are vertical, horizontal or oblique in position. Even the youngest may be led to see that leaves are green, and that flowers are white, yellow, red or blue. The most accomplished draftsman never reaches a point where he can safely disregard lines of action and dominant hues.

2. A study of the sizes and shapes of parts as expressed in mass and their characteristic hues.

Having observed and recorded the general direction of a leaf-stalk or flower-stem the pupil is prepared to notice the length and width of the leaf and the relative size of the flower. Having seen a leaf as green he is ready to discriminate between a blue-green and a yellow-green leaf, and to record his observation by the use of a more closely matched color. An accomplished draftsman never ceases to study proportions and never ceases to discriminate between one precise hue of color and another.

3. A study of the interrelations of the masses of the parts, both among themselves and with reference to the mass of the whole, as expressed in silhouette.

This requires a closer observation of the object, and a greater facility in translating the three dimensions of the object into the two dimensions of the surface upon which the drawing is made. It demands thoughtful comparison of the sizes and shapes not only of the parts themselves but of the spaces between them, an exercise the most proficient draftsmen never outgrow. Moreover this practice in seeing and recording things in silhouette is fundamental as a preparation for decorative design.

4. A study of the modifications in the apparent shapes of the parts, according to the angle at which they happen to be seen, as expressed in line.

To see and to record successfully the effects of foreshortening demands a keener eye and a more skilful hand than any exercise previously outlined. General proficiency in rendering the apparent shapes of objects, or in perspective drawing, as it is often called, was never attained by Egyptian or Greek painters, or by any painters whatever down to the central period of the Italian Renaissance. Correct perspective drawing is not yet universal even among professional artists. The plant presents in simple and attractive form the fundamental problems of appearance drawing, which, under more complicated and involved forms, have perplexed and will continue to perplex even the masters of delineation.

5. A study of the superficial anatomy of plants, the apparent structure of each part and its articulation with other parts.

This requires yet closer observation and finer muscular control, for the details involved are smaller and less distinct. In plant drawing the test of the draftsman's power is the joint, just as it is in drawing the human figure. The draftsman must not only see but interpret what he sees. Every scrap of information he possesses concerning the internal structure of the object will inform his hand as he draws and gives significance to every line and dot. His drawing will illustrate a statement by John La Farge, to the effect that it is the artist's intention that gives significance to his line and makes his work precious.

6. A study of the plant for its elements of beauty.

The parts of the plant embodying these elements have been studied by the pupil in every previous division of the course, but now they should be considered again synthetically from the point of view of the artist searching for beauty of form and color.

Subtleties of proportion, graces of line, harmonies of color, gradations of light and shade, delicate contrasts of texture, glints, accents, irridescences heretofore unobserved or unrecorded should now become the quest of the pupil—the fascinating, the delightful, and yet unattainable quest, which has enthralled the artists of all time.

The following of such a course year after year will give both skill and insight. Tennyson spoke the truth when he wrote:

"Flower in the crannied wall,
I pluck you out of the crannies,
I hold you here, root and all, in my hand,
Little flower—but if I could understand
What you are, root and all, and all in all,
I should know what God and man is."

And if we could draw the little flower, root and all, and all in all, we would have command of the elements of all art.

CHAPTER II

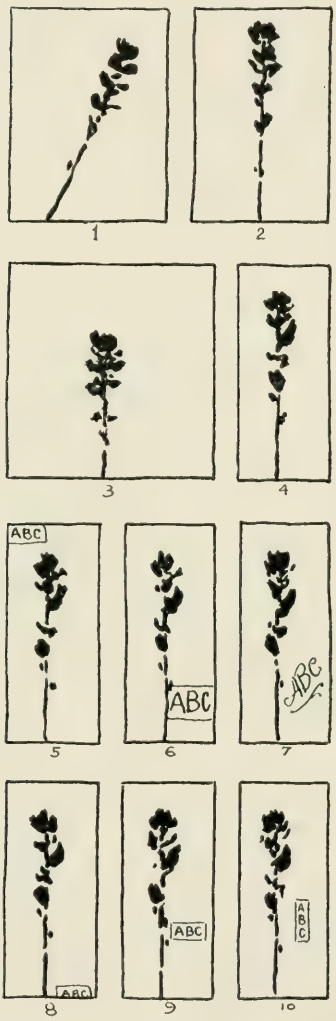
ACCEPTABLE PLANT DRAWING

WHATEVER the subject,—spelling, language, geography, arithmetic, nature,—school papers should be beautiful. Each sheet is an opportunity for training in craftsmanship. "What is worth doing at all is worth doing well." A sheet of plant drawing is no exception.

Good results do not come through luck. The teacher who secures good results in any grade is usually a person of intelligence and forethought. If the plant to be drawn is grass-like with linear stems and leaves and bristly appendages the pupils are led to see that a pencil point, colored or black, will enable them to render such a plant simply and without unnecessary effort. If the plant has broad leaves and flowers a brush will be the better medium. If the significant details of structure are to be rendered the medium would better be a sharp pencil or pen used on comparatively smooth paper. The thoughtful teacher always asks first, in the presence of a new problem, What is the important thing to be aimed at in this case? What medium will express this thing most effectively?

But a pretty good drawing may be disadvantaged by its setting, like a child in a slum. It may have the wrong companions, be dressed in the wrong clothes, be ill-mannered and awkward. From the first the aim of the teacher should be to lead the pupils to be thoughtful about the size and shape of the sheet, the placing of the drawing upon the sheet or within margin lines, the character of those margin lines, and the character and placing of the signature or other identifying mark upon the face of the sheet. The following illustrations and notes may prove helpful in teaching some of these points:

1. Bad. Line of growth out of harmony with the lines of the sheet or inclosing form.



2. Bad. Not so bad as the first, but too tall for the sheet and too rigidly in the middle. No hint of freedom or ease of position.

3. Bad. Better placed than 2, but too low in the space, and too much space around it. Lack of harmony between the shape of the spray and the shape of the inclosing form; spray a vertical oblong, inclosing form square.

4. Good. Space adapted to the spray. General shape and size in harmony with it. Spray well placed.

5. Bad. Spoiled by the placing of the initials, penned in a corner.

6. Bad. Spoiled by the initials. Too large; hung on a sign from stem to margin line.

7. Bad. Spoiled by the initials. Too elaborate; placed at an odd angle without reason and out of harmony with the principal lines of the sheet.

8. Bad. Spoiled by the initials. Initials do not have to sit on anything.

9. Not too bad, for the lines of the name-spot are in harmony with the lines of the sheet; but its long axis is out of harmony with the other long axes, those of the sheet and the drawing.

10. Good. Even better than 4. Better balanced, because of the placing of the initials. Long axes all in harmony.

11. Bad. Violates the principle of Unity. Intersecting stems without excuse, and both unrelated to the lines of the sheet. Crossed lines always form an ugly attraction and tend to draw the eye away from the more important parts.

12. Bad. One spray, but sprawled over the sheet, making strong, oblique lines out of harmony to each other and to the lines of the sheet. Such a spray may be turned and drawn as in 14, the two heads forming practically one mass for the eye to grasp easily.

13. Bad. Two masses again, but somewhat unrelated, therefore lacking unity. Spacing suggests equal thirds, as objectionable as halves, and for the same reason. See 2.

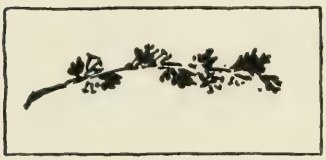
14. Good. Name spot well related to all the rest. Lines of stems and leaves lead the eye towards it. Falls in with the other parts to form a pleasing mass well balanced on the sheet.

15. Bad. Stiff lines of sprays out of harmony with curved line of the circle. Lack of unity because of the unrelated lines of the sprays. Had they converged downward to suggest a common source somewhere below the frame the effect would have been better.

16. Bad. Odd shaped inclosing forms, shapes without apparent reason for their unusual character are always to be avoided.

18

17. Bad. All attempts to suggest corners turned over, holes or slits in the sheet, or any device for holding the drawing upon the paper (!) are out of place and contrary to a fundamental law of design. "Art is the purgation of superfluities," said Michelangelo.



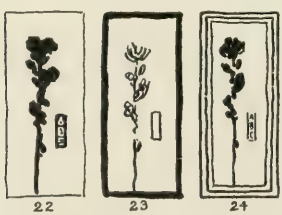
19

18. Good. Curved lines of the spray in harmony with the circular inclosing form. Horizontal and vertical lines in the initials give a clue to the correct position of the whole,—tell when the drawing is right side up,— and harmonize with the vertical and horizontal axes of the drawing.

20

19. Not too bad, but the sudden chopping off of the stem suggests not life (a charm in plants) but death. When the stem is continued to the inclosing form it suggests to the mind a source of life beyond. The framing lines form a window through which a part of a living plant is seen.

21



22 23 24

20. Bad. Shadows as attractive as the real thing (usually more so when poorly drawn). A withering branch; cut off; hopeless!

21. Good.

22. Bad. Inclosing lines too light; out of harmony with the character of the drawing.

23. Bad. Inclosing lines too heavy; out of harmony with the character of the drawing.

24. Bad. Inclosing lines too attractive. "Fancy" margin lines always attract the eye and draw it away from the legitimate center of interest.

25. To be avoided. Suggests lack of harmony between the frame and the spray. The spray has overpowered the frame and broken it. Spray not seen through a window but a window through a spray!

26. Bad. Oblique axis of spray out of harmony with the lines of the inclosing form. Most attractive part, center of interest, in one corner close to a margin line.

27. Bad, as it stands, but it might be redeemed by flowers of attractive color. Center of attractions now too low. The center of attractions must always be on the vertical axis of the sheet and slightly above the actual center of the sheet.*

28. Good.

*Each picture has three centers: 1, The geometric center, found by diagonals, important because it locates the vertical and horizontal axes. 2, The center of interest, the supreme thing in the picture, that to which the eye returns again and again for satisfaction. 3, The center of attractions, the point about which all the lights and darks, lines and spots of the picture are balanced.

29. Bad. Attractions (dark spots) all of about equal attractive power. Interest scattered. Lines of stems tend to lead the eye away from the center and dissipate the attention.

31

30. Better. Secured by pruning the spray and turning it so that the parts fall into a more compact whole. One flower most prominent. All spots of black smaller than this, and in a diminishing series, easily discovered by the eye.

31. Fair. Without the name spot the sheet is unbalanced and the long axis of the mass of the drawing is out of harmony with the inclosing form (cover the name spot with a bit of paper and notice the result). The name spot, by extending the line of the first berry spray and adding to the attraction on the left, restores the balance of the sheet and obscures the fact of an oblique axis.

32

32. Good. When no inclosing line is used (the lines in this illustration represent the edges of the sheet) a suggestion that the spray is a part of a larger, living whole may be given by vignetting the stem, that is, by diminishing gradually its distinctness and the amount of its detail until it disappears or "dies away" into the paper.

In plant drawing the eye may be drawn to any part the artist may choose by his manner of rendering. By increasing the amount of detail represented in

a selected part, by emphasizing its contrasts of light and dark, by strengthening its color or (which amounts to the same thing) by omitting detail in other parts and diminishing contrasts or colors in those parts, the selected part may be made so attractive to the eye that it becomes the center of interest.

Unity, that all-important element of beauty, may always be secured, even in the most refractory spray, by this emphasis of the most important part, through the proper subordination of all the other parts, in a consistent sequence of hue, value, intensity, and definition of detail.

CHAPTER III

DRAWING THE FALL FLOWERS

WHICH? Those which are at hand and common. Not the rare ones. The destruction of our native wild flowers must not be laid to public school children. Let "fall flowers" include grasses and sedges with their flower-like fruit cases, the shrubs with their colored berries, anything available which children can draw.

Given the specimen, the teacher must ask herself, "How is this to be studied?" A plant may be studied and represented in six ways:

1. For its Movement, that the children may think of its characteristic lines of growth—straight, curved, erratic.

2. For its Form, that the children may think of the relative measures of its masses of leaf, flower, fruit, and their relations to each other.

3. For its Values, that the children may think of its parts as being relatively lighter and darker.

4. For its Color, that the children may think of hues and values and harmonies.

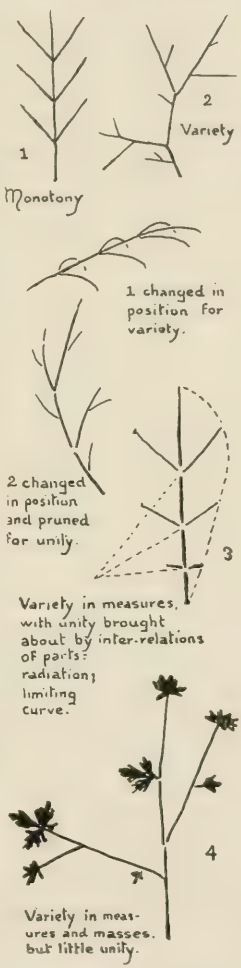
5. For its Details, that the children may think of structure—articulations of part to part, delicate beauties of curvature, adaptation of form to function, changes in texture, etc.

6. For its Ensemble, that the children may think of the spirit of the thing

> "All in the pleasant open air,
> The pleasant light of day;
> And blown by all the winds that pass
> And wet with all the showers."

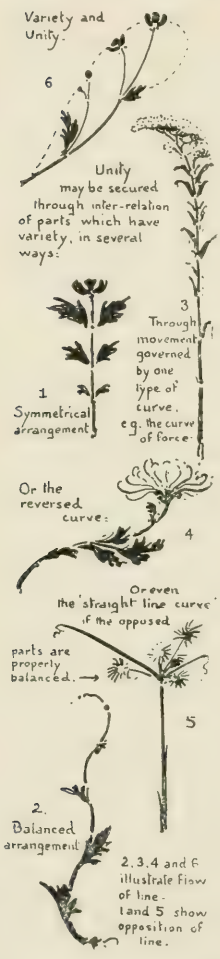
With a definite aim in mind, an aim proper to the grade, the next question is, "Considering the character of the specimen and the limitations of the class, what medium of expression should be

used?" If the subject is grass and the grade low and the aim is movement of growth, the colored crayon and manila drawing paper will be chosen because a single stroke may be made to express a stem or a leaf, and the color pleases children. If the subject is golden-rod and the grade is high and the aim ensemble—the effect of the thing as a whole—water color and cream white paper of good quality may well be chosen as the medium. To express form only we will use a flat wash of ink or other monochrome; to express details a sharp pointed pencil or pen. In any case we will have a definite aim and a reasonably chosen medium. When we have determined these we will lead our children to come to the same conclusions, and then have the materials distributed.


1
2
Variety
Monotony
1 changed in position for variety.
2 changed in position and pruned for unity.
3
Variety in measures, with unity brought about by inter-relations of parts: radiation; limiting curve.
4
Variety in measures and masses, but little unity.

Now for the lesson: When you sit for a photograph you and the photographer conspire to produce the most creditable result possible. You dress for it and he poses you for it. So it must be in drawing from the fall flowers. Choose your specimen, try different positions for it, select the best, prune away unnecessary and confusing details, leaving only essentials to characteristic truth and beauty. For example, the awkward spray shown at 1 may be pruned to a single forked stem with its flower and leaf; the others are practically repetitions of the same typical forms. If the spray is monotonous, 1, turn it as indicated in the next sketch below. If it sprawls like 2, turn it as shown in the second sketch below at the left. A specimen may sometimes be brought under the law illustrated at 3 by

judicious pruning, and by turning the specimen a unity of mass may sometimes be discovered, analogous to that illustrated at 6.


Variety and Unity.
6
Unity may be secured through inter-relation of parts which have variety, in several ways:
1
Symmetrical arrangement
3
Through movement governed by one type of curve. e.g. the curve of force
Or the reversed curve:
4
Or even the straight line curve of the opposed
parts are properly balanced.
5
2.
Balanced arrangement
2, 3, 4 and 6 illustrate flow of line. 1 and 5 show opposition of line.

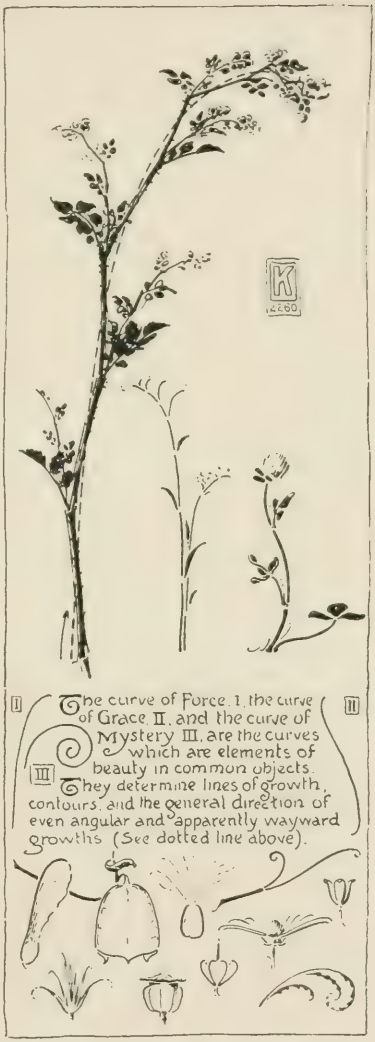
The principles of beauty which control all arrangements are, in ordinary language, variety and unity,—variety in the measures or lengths of the parts, in space divisions and in masses; unity in the effect of the whole through interrelations of parts. We will compose our specimen so that its lines and masses fall into some sort of system, an ordered relationship which has some bond of union; as, for example, a general upward-and-outward tendency manifested in each and every line; a characteristic curve repeated and echoed throughout the whole; a rhythmic arrangement of masses where one is dominant and the others subordinated in an orderly series; or a grouping of parts according to the law of symmetry or balance. The little sketches will help to make clear these different unities. Study them.

Having decided upon that position and arrangement of the specimen which shall suggest at once a natural pose and a beautiful example of plant growth, next determine the size and shape of the sheet, by placing the spray upon it or by estimating the requisite amount of space demanded for the drawing. A pencil

held flatwise upon the sheet to indicate the position of any proposed cut may be of service as an aid in estimating the proper size.

In the lower grades we will draw the plant as it grows in nature from the growing point upward and outward in order, — stem, leaves, buds, flowers,—making each stroke mean as much as possible.

In the upper grades we will suggest that order of growth with one or two delicate pencil lines, or we will merely think it, and then draw as seems most convenient. We will not mumble and run our words together, but we will enunciate distinctly and talk deliberately, suggesting by each touch, and by the touches we omit, all the truth we can express about joints and bracts and other details of growth. If we are using color we will touch in the more delicate hues first, while the water in our jar is clean, and later we will paint the darker colors. Others may prefer to paint in the dominant color first. We will just use our common sense in deciding how to proceed with each specimen. Try it the way which seems easiest and most promising. We will try to discover what quality the various colors have in


I
The curve of Force. I. the curve of Grace. II. and the curve of Mystery III. are the curves which are elements of beauty in common objects.
III
They determine lines of growth, contours, and the general direction of even angular and apparently wayward growths (See dotted line above).
II

common, rather than in what they differ or disagree. Instead of thinking of the golden-rod, for example, as yellow and green, we will look for a tint of green in the yellow flowers and a tint of yellow in the green leaves, and of both colors in the stalks and pediceles.

If we are drawing in pencil we will indicate, by means of very light strokes, the general directions of the principal stems, then by light touches, the relative lengths of parts from joint to joint. Then we will suggest very lightly, by touching the paper only here and there, the general shapes and positions of the different parts. Next we will indicate the thickness of each important stem. Now we are ready to sketch each part more carefully, with very light lines, and when this has been done, to go over it all again thoughtfully, drawing with all the skill we can summon, emphasizing a leaf-edge here, a bit of shadow there, bringing out this texture by a delicate continuous line, and that by a heavy broken one, until the result is the best we can do.

Finally, we will place our name or initials upon the sheet where they will add to the beauty of the sheet by perfecting the balance of it. If we have miscalculated and the sheet is out of balance after all, we will trim it to restore its balance, and leave it the best finished product of which we are capable at this stage of our ignorance.

CHAPTER IV

FALL NATURE DRAWING

THAT the primary requisite in every good lesson is interest, is one of the first principles of pedagogy. Many teachers of many minds, many classes of many kinds, make it impossible to formulate a hard and fast recipe for obtaining this interest. Each case must be diagnosed separately.

Many suggestions may be offered for teaching a nature lesson, but only a few rules can be laid down. The most important, and the one most often neglected, may be given in the form of the moral to the old fable: "First catch your hare." Frequently teachers have failed to secure good results by neglecting to observe this rule, and more than once a poor lesson has been retrieved by the compelling power of a beautiful subject. With the end of the lesson in view, then, the subject must be carefully selected. In primary grades this task should never, and in grammar grades seldom, be left to the children, unless under the guidance of the teacher.

Suppose the September outline for primary grades reads as most drawing outlines do, "Draw grasses and sedges." The first question of the teacher should be, "For what purpose?" If for growth and variety in movement, a good selection would be carefully chosen examples of the species so familiar to everyone who has lived in a garden, known as garden grass.

Let the children gather around the desk and help the teacher to make it grow again on paper. Ask them to find where the little green shoot commenced its journey and which way it started out to find the sunshine; see if they can discover where it "stopped to think"; and let them watch carefully just how you repeat the leaf "thought"; then let them show which way the little grass went next on its quest, and Johnny draw the

next leaf, while teacher herself shows how when it had topped its neighbors it laughed out loud in the blossoms, which give such an explosive movement in this particular grass.

For the next lesson select a grass with an entirely different habit—perhaps the timothy with its soft, fuzzy heads and graceful stem,—and if a bright, breezy teacher recites some of the verse which Emerson wrote to Ellen, who was, perhaps, then a little

Drawings of grasses by primary children.

girl like Ethel here, the children will better catch the spirit,—and give the "tune."

"The green grass is blowing,
The morning wind is in it;
'Tis a tune worth the knowing,
Though it changes every minute."

Again the children might be given a hektographed copy of the line,

"Grass with green flag half-mast high,"

and then taken to a near-by field to find the very best illustrations—afterwards drawing and pasting the printed slip on the page, if they are too young to write. Or find some of the grasses with brown twisted leaves to illustrate, Good-night.

"Good night, little shivering grasses,
Lie down 'neath the coverlet white
And rest till the cuckoo is singing.
Good night, little grasses, good night."

When studying the grasses there is a good opportunity to give the children a little manual training which will correlate at once with drawing by showing them how to manipulate their brushes in order to give the quick, direct stroke which alone will tell how the long, slender stem of the grass grows,—how to "bear down" and "lift up" on the brush to make the grass leaves twist and turn. In the third or fourth grade the children may try to express the character of growth in more difficult plants. Here again, choice is the first essential for success, and if this falls upon the golden-rod, select from the many varieties one which combines the few typical characteristics. To emphasize these by contrast, gather a few other yellow flowers.

Just how would one teach this to a class? That is very hard to describe, but one might begin like this—and it would be a good fortune which a grade teacher might easily bring to pass, if a nature or literature lesson that very morning had taught a poem or legend about the golden-rod. Do you know this flower, children? Yes, I see that you have a speaking acquaintance with it. But people whom we know well we can recognize at a distance and in more than one way. Would you know the golden-rod if you saw it across the field? By the color? yes. But suppose this wild sunflower of the same hue grew beside it? Yes, the shape of the flowers and the curving stem would tell -just as you would know your mother if you saw her at a distance, not only by the color of her hair and her clothes but by her shape and her walk.

Does the golden-rod stem bend equally all the way? Show me on the blackboard just how it curves. No, you cannot if you draw so slowly. It reminds me of the lines the rockets drew on the sky last Fourth of July, and you remember how fast and how forcefully they drew them. Can't you hear them "swish" through the air now? To get the skyrocket curves

you must draw the lines "fast and sure." Let us try some on the wrong side of the paper. When you get a good one we will turn the paper over and try the golden-rod stem. Are you ready? Now I advise you to take "almost water" in your brushes and show at first only where the stem is "going to be." See if you can guess why. Right; so that we can place some of the flower masses and leaves in front of the stem.

Now how little need you tell about the flowers in order that your picture may be recognized as a "truly" golden-rod? The

Sketches illustrating foreshortening of leaves.

shapes of the yellow and where it grows. Very well. And can you see what keeps it in place? Then let us show the stem and little dark leaves under the yellow. (This involves a little "technique" which should be abundantly illustrated by the teacher.) Notice next how the leaves grow, each one having some peculiar grace all its own. What is the golden-rod fashion for fastening leaves to the stem? Do any leaves point up toward the blossoms? Let us emphasize these. Do any point straight out to the margin? Let us look for them. And last of all, let us draw the stem as dark as it looks between the blossoms and from leaf to leaf, noticing any change in size.

But there comes a time in the grades when general characteristics and approximate shape, and mere suggestions of the color do not satisfy even the children —when they want to know just how to make a leaf look as if it were "coming toward you" or "going back from the stem" or "curled over so as to show two sides." For the first study of the foreshortening of leaves

Drawings emphasizing the study of joints.

select some common entire leaf—like the plantain, the nasturtium, or the lilac—or, in an upper grammar grade, the clover. Old devices to teachers, but new at some period in his career to each child are these: To place a large leaf against a window pane far enough away so that no detail is visible and to let the children draw in silhouette the various shapes made by the varied positions; to cut in a card a window about the size of the leaf and to notice through it the small space occupied by the leaf in the foreshortened views; to sit down at a desk with

the children around you and draw the leaves in any "hard" position they suggest for you, trying to explain to them just how you determine the relation of one part to another. The accompanying illustrations show fair results from such study in sixth, seventh and eighth grade classes.

The next problem is the combination of stem and leaf with a study of the joint. Such an example as the first on page 31, drawn two or three times in different positions, is better than one offering more complications. When the children have mastered the difficulties involved in simple subjects like this, they are ready for a spray with flowers or fruit. In selecting this measure your class and choose something that the children may be reasonably expected to do well. A simple spray* well drawn is much more attractive than a complicated one poorly and hastily attempted, and the satisfaction secured by success gives the children courage and confidence with which to attack the next problem. And do remember occasionally to get something that the children have not drawn every year since they first came to school. This need not necessarily be a greenhouse exotic or rare plant whose species might easily be exterminated, but it might be for once a garden flower,—if you have a friend who has a garden,—or something gathered afar on a week-end holiday, or something contributed by one of the children, with whose resources the teacher should keep in touch.

"Drawing is simply a seeing of relations."

"One thing at a time and that done well
Is as good a rule as any can tell."

By keeping in mind these two aphorisms it is easy to teach any grammar grade child of average intelligence to draw well enough.

After selecting the best view of the plant and having done any necessary pruning and chosen the best arrangement on the paper, the pupil is ready to draw. To teach the child to study

* Having the spray, provide for it a background of the same size and color as the paper on which it is to be drawn.

intelligently is the work of the teacher. Any child can judge with reasonable accuracy the position of the lower end of the stem if he relates it to the right and left and lower margins of the background and can indicate by a point a similar position on his paper. The highest point and those marking the extreme right and left should also be indicated. If there are masses of blossoms or berries or particularly prominent flowers or fruit these should be located by their relation in position to the points already placed and to the background before the study of the detail begins.

The lowest point in the stem having already been indicated, the pupil can determine next and accurately enough, if he gives his attention to this and nothing else, whether the stem starts vertically or slants to the right or left and how much, to the first leaf or branch, and can indicate this by a quick, light sketch line. He can at the same time guess pretty shrewdly at the length of this joint. Next consider simply the size of the stem to this point. A little study of the joint comes next and the manner of union of leaf or branch with the main stem peculiar to this species.

If a leaf comes here, indicate first the direction of the leaf-stem, noticing the angle it makes with the main stem, to what point in the margin of the paper it points. Continue the line of the stem through the midvein, finding first the point of the leaf by its relation to the main stem and the margins of the paper. Indicate now the size of the leaf stem. Study next the outline of the leaf through its relation to the midvein. Show the children carefully how to follow the leaf edge as it starts away from the midvein, then runs parallel to it, then approaches it, crosses it, curves away, returns again to the side from which it started, and ends in a most fascinating, foreshortened, vivacious, little tip. The outline of the opposite side of the leaf may be studied in the same way, in its relation to the midvein and to the half already drawn.

The first leaf having been indicated, the direction of the stem to the next joint may be considered, its size, the next leaf,

A sketch showing thoughtful drawing of joints.

and so on, until the whole spray, leaves, flowers, or fruit, is drawn in light pencil lines. The illustrations on pages 31 and 34 show the result of such study. When the children in upper grammar grades can sketch easily a spray in this manner, it is time to consider "finishing." But that is another story.

"But how mechanical this sounds," you may say; "would it not be better to read the children a poem and to show them examples of artists' rendering of nature subjects, and let them catch the spirit of the thing?" By all means read to them from the poets and show them all the good work possible, but do not forget that Corot, the most sensitive interpreter of nature's subtlest moods, when asked to sum up in a word the basis of the success of sixty years of happy work, said, "Draw, draw, always draw, and mind your values." Just such work as I have suggested must be done with our pupils in order that they may learn to do intelligent, independent work. The sooner they acquire "freedom under the law," the sooner they will be ready to catch the spirit which is above all law.

CHAPTER V

OBSERVATIONAL DRAWING

AUTUMN completes the cycle of plant life. The seed planted in the spring has passed through its phases of growth to seed again. The leaves whose development the children watched during spring and summer as they unfolded from the buds and grew to full vigor, are about to give way to new buds which, throughout the winter will show promise of another spring.

The seeds are ready to distribute themselves, and well provided with means for so doing. Pupils will find interesting work for brush and pencil, in illustrating the winged seeds. They have many suggestions to offer upon the problem of aerial navigation. Their wings are of various structure and have different methods of attachment to the seeds they are to carry, and different balance between seed and wing. They fly with varying lines of motion through the air.

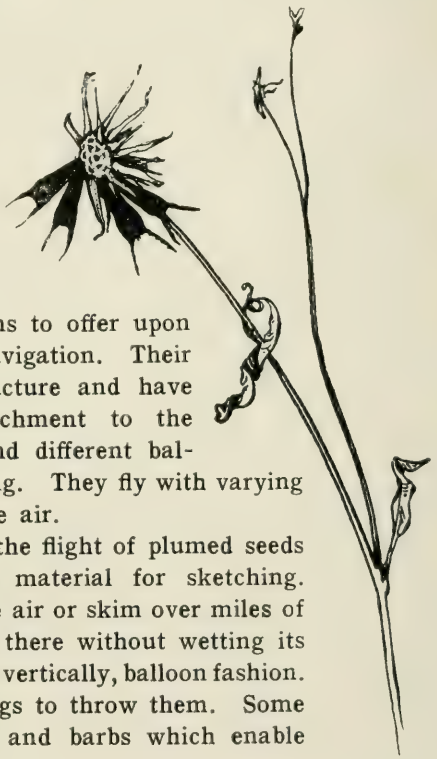


Figure 1.

The arrangements for the flight of plumed seeds furnish equally interesting material for sketching. Thistledown can float in the air or skim over miles of water, touching here and there without wetting its plumes. Dandelion seeds fly vertically, balloon fashion.

Some seeds have springs to throw them. Some are furnished with hooks and barbs which enable them to "steal a ride." Fig. 1.

The myriad seed forms are shaping themselves after cunningly devised designs. They show strength and ingenuity of construction, great beauty and a wonderful foresight of conditions to be met. One is reminded of legends of the work of dwarfs who toiled at instruments of curious pattern, so exquisitely adapted to the purposes in view that when they were put to use, even by clumsy hands, the results appeared magical.

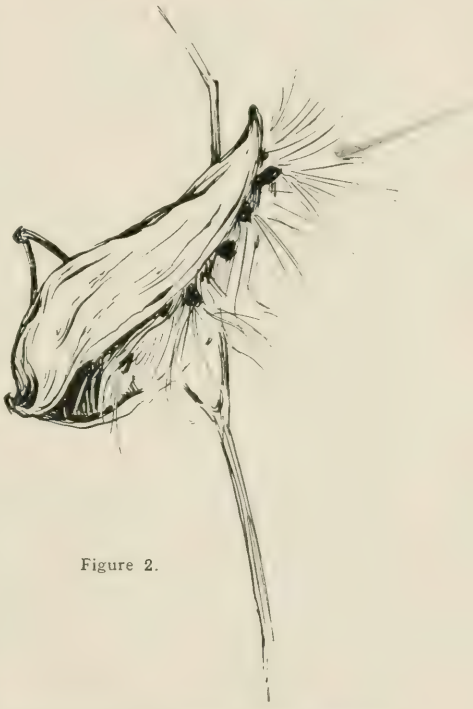


Figure 2.

Almost any seed is a good topic for a series of sketches. Milkweed pods are common and big enough to be seen. They are graceful in shape. The short stems have eccentric angles. When one discovers the protection offered to the seeds by the spongy structure of the pod in which they are packed, as we pack bottles in corrugated paper, some suggestion of its texture will probably appear in his drawing.

Later the pod bursts and the "fish" appears with dark, well arranged scales and gleaming silver. Then the seeds begin to spread their plumes and children who have not watched their development are likely to draw them thus, Fig. 2, when in reality they are like Figure 3.

They reach out, seed first, and hold by a few threads till a breeze comes that can pull them away. Such a breeze is strong enough to send them on a long journey. A white podful crowding out awaiting a breeze is a beautiful sight. A single seed with its plume makes a pretty drawing. The shapes of the

pods are often like birds with wings spread for flight. Their color in late fall and winter is worth painting.

Maple seeds furnish material for a delightful series of sketches. Their color varies at different stages of development. The structure of the wing is beautiful.

The embryo plant is closely coiled in its shell. The seed forms are finely balanced, and the wings, even the tattered one of the weather-worn veteran of many winds, slow in finding a resting place, preserve to the last the power to whirl the seed.

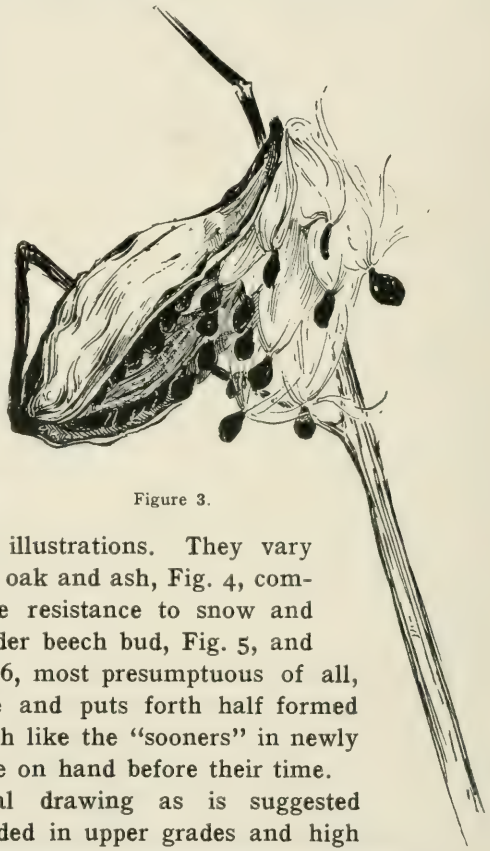


Figure 3.

The structure of buds and their firm anchorage to the stem offer opportunity for illustrations. They vary from such buds as the oak and ash, Fig. 4, compact and offering little resistance to snow and wind, to the long, slender beech bud, Fig. 5, and the hobble bush, Fig. 6, most presumptuous of all, which disregards scale and puts forth half formed leaves in the fall, which like the "sooners" in newly opened public lands are on hand before their time.

Such observational drawing as is suggested above is especially needed in upper grades and high schools, as an accompaniment of nature study and botany.

A photograph of a plant form with all its clearness of detail is a delightful thing, but as a recorder of observations the camera does not equal the pencil and brush. Not because anything is lacking. It is rather because nothing is lacking. The camera

Figure 4.

has little power of elimination or of emphasis. It records everything within focus with equal clearness. The student, pursuing some line of observation, notes this fact and that, now with sharp, accurate detail, now with suggestive lines. His sketchbook shows not all of nature but the things he wishes to describe. It is a record of his way of thinking and seeing. Nature drawing by school pupils will gain an element of great value when it includes records of individual observation out of doors as well as in. Not drawings of everything seen but notes made along some particular line of study.

Figure 6.

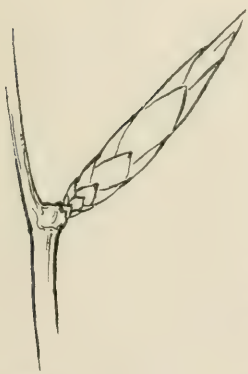


Figure 5.

CHAPTER VI

HAND WORK IN LEAF STUDY

ONE bright day in October when the maple trees were a brilliant mass of red and orange and the nut trees were all turning brown, I suggested to the children that we make a collection of all the different kinds of leaves we could find. I gave them a few to start with and their response was quick and their effort sustained. Every day they brought new leaves which they learned to recognize and name. We had a large botany press holding fifty or sixty sheets of botanical driers. Each child was assigned a place for his leaves in the press and had four or five driers for his use. Here they put their leaves each day as they brought them.

After the children had learned to recognize and name some fifteen or twenty varieties, we began to study the leaves more in detail. Each one had a laurel leaf and made a very large drawing of it eight or ten inches long. Then they learned and labelled the parts,—blade, petiole or leaf stem, apex, base, margin and midrib. Using these names for the different parts of the leaf, the children began to compare the leaves they had found, picking out those that were alike in general shape.

1st, those that were linear, as Crocus, Narcissus, Grasses.

2nd, those that were lanceolate, as Laurel, Willow, Chestnut, Lily-of-the-Valley.

3rd, those that were heart-shaped, as Violet, Linden, Catalpa.

4th, those that were rotund, as Geranium, Begonia.

They classified them as to outline.

1st, those with entire margins, as Lily-of-the-Valley, Tulip tree, Laurel.

2nd, those with serrate margins, as Elm, Chestnut, Beech.

3rd, those with scalloped margins, as Japanese Ivy, Large-toothed Aspen, Chestnut Oak, Violet.

4th, those with cut margins, as Black Oak, Hawthorn.

5th, those that were lobed, as the Tulip tree, Sugar Maple, Grape vine.

6th, those that were cleft, as Swamp White Oak, Scarlet Oak.

7th, those that were parted, as Cut-leaf Maple, Rose Geranium.

To bring out clearly the different kinds of margins, I gave the children black paper and let them trace around the leaves which they brought. Then they cut them out. Both pieces of paper were saved and mounted, the silhouette leaf which they had cut out and the piece of paper from which it was cut, thus making twin pictures, the black leaf, and the white one with the black background. After they had made a few of these silhouettes, it was surprising to see how quick they were to detect slight differences even in leaves from the same tree. The difference in the margins and whether the leaf was lobed, cleft or parted came out so clearly that the children can never forget.

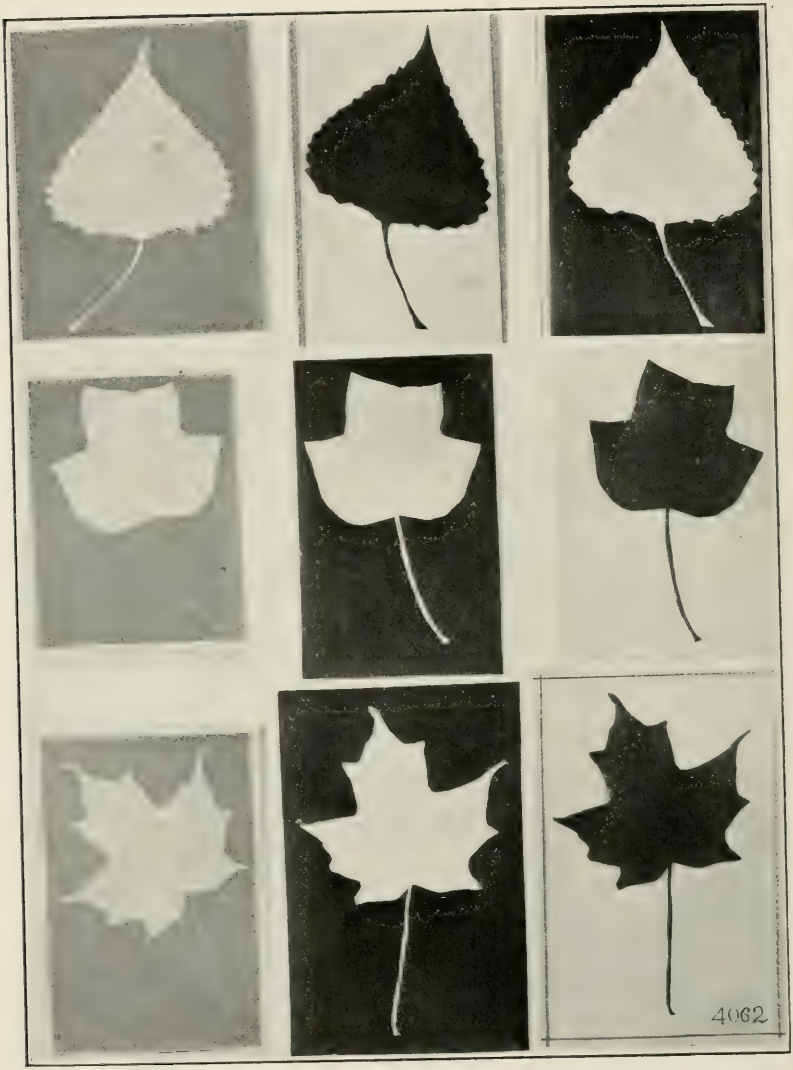
To bring out the general shape and veining of the leaves, the children made blue prints of every one they brought. The blue prints were especially valuable in that they emphasized the veining. The children grouped

1st, those that had parallel veins, as Plantain, Lily-of-the-Valley, Crocus, Narcissus.

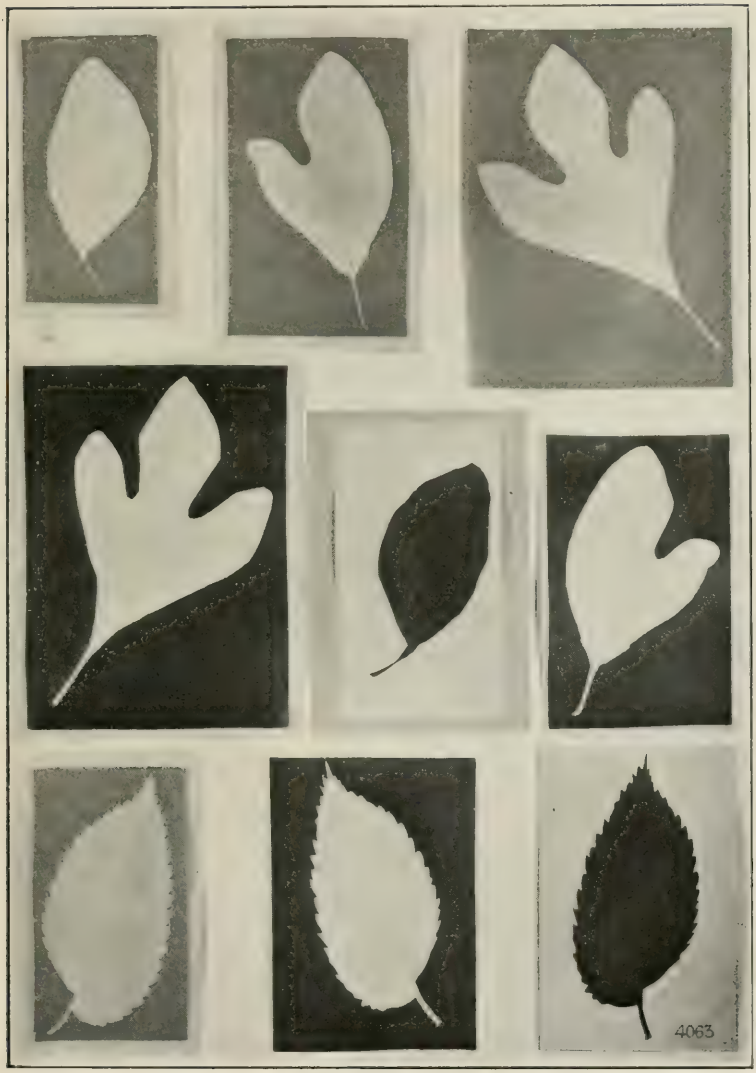
2nd, those that were feather veined, as Chestnut, Beech, Elm.

3rd, those that were palmately veined, as Sugar Maple, Japanese Ivy, Geranium.

After the children had made a careful silhouette and blue print of each leaf they had brought, they made a freehand drawing of each one, taking another leaf of the same kind to draw from and not using the identical leaf of which they had made their silhouettes and blue prints. The results were very satisfactory and I attribute it largely to the accurate work necessary in the silhouette making and to the close attention to shape, necessary in careful cutting. Their power to recognize many different leaves grew apace. Soon they had doubled their collections. There were many leaves, of course, which were too difficult to cut, but their eyes had been opened by cutting the



Cuttings and blue prints of common leaves.



Cuttings and blue prints of common leaves.

more simple forms and they were ready to see similarities and differences in each new specimen.

The silhouettes were not as pretty as the blue prints, which showed the veining and in many cases the texture of the leaves, but the difference in shape and in the margins came out more clearly in the black and white.

The blue prints were made sometimes from fresh leaves and sometimes from those that had been in the press. The

Illustrations showing several ways of effectively mounting the prints and cuttings.

silhouettes were easier to make if the leaves had been in the press for an hour or so. The work of blue printing was done before school and when the children went out at recess. The silhouettes were made before school, also, and sometimes on rainy days at recess. The leaves were kept in the press for four or five days until they were thoroughly dry. Then they were mounted before school with narrow strips of gummed paper, each child working independently and putting his work away when finished in his own Botany box.

The knowledge they had gained they used in their English lessons. They wrote descriptions of the three kinds of veining

they had learned,—parallel, feather and palmate veining. Each description was illustrated by a blue print of a leaf typical of that kind of veining. When these descriptions were finished, each child bound into book form what he had written with the accompanying illustrations and made a leaf design for the cover of his book.

This work has been done by city children—boys and girls—whose average age is seven years. The lessons were not an isolated experiment. They were the outgrowth of lessons which have been given to children of the same age for some years. The children made their collections and learned to recognize and name the leaves. They learned the parts of a leaf—to classify leaves by their general shape, as determined by veining, and by their outline. To emphasize the general shape and outline, they made silhouettes. To make the veining clearer, they made blue prints. The freehand drawing of the leaves studied came as a last expression of the child's conception of their shape and character. In no case did the child draw the individual leaf of which he had made the silhouette and blue print, but another leaf of the same kind was given him to draw from, so that in his drawing he might bring out the characteristics of the species and not of the individual leaf with which he had previously been working.

For the development of concentration and control, for definiteness and accuracy of seeing, I am sure the children have had no more valuable lessons than these in leaf study.

CHAPTER VII

PERSPECTIVE OF LEAF AND FLOWER

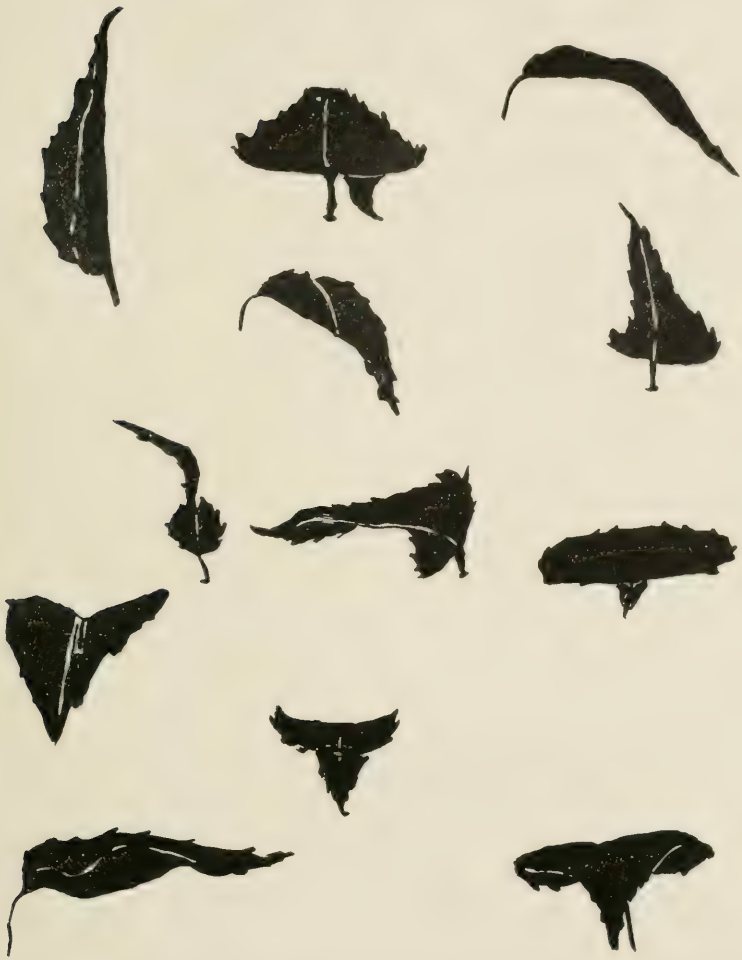
THE making of a drawing is simply the recording of an idea. Ideas of form or of appearance in children's minds are usually very vague. Foreshortened appearances are not thought of generally until special attention has been called to them. In drawing leaves and flowers everyone knows that children will usually represent them as seen from above. That is the way they think of them. They know their real shape, though in nature they are seen foreshortened far more often than otherwise.

Lessons in foreshortening leaves and flowers should begin as early as the fourth grade. Each child should have an individual specimen—say a lilac or some other simple leaf. First direct the pupils to hold the leaves between their eyes and a window so that the side edges are toward them. Then direct them to draw what they see. Few will do it the first time. They haven't the courage. Some will tell you that they are afraid if they draw the leaf as it looks it won't look right.

Now ask the pupils to hold their drawings out in front of them in a vertical position, and beside the drawings to hold the leaves in the position in which they drew them. Stand at the back of the room and see that every pupil is following directions. Ask the pupils to nearly close their eyes so that they can just see their leaves as dark spots against the papers. Comparing the drawing and leaf they will begin to understand what shape they should draw. Perhaps some of the children will have made good attempts at foreshortening the first time. If so, commend these, and show them to the class.

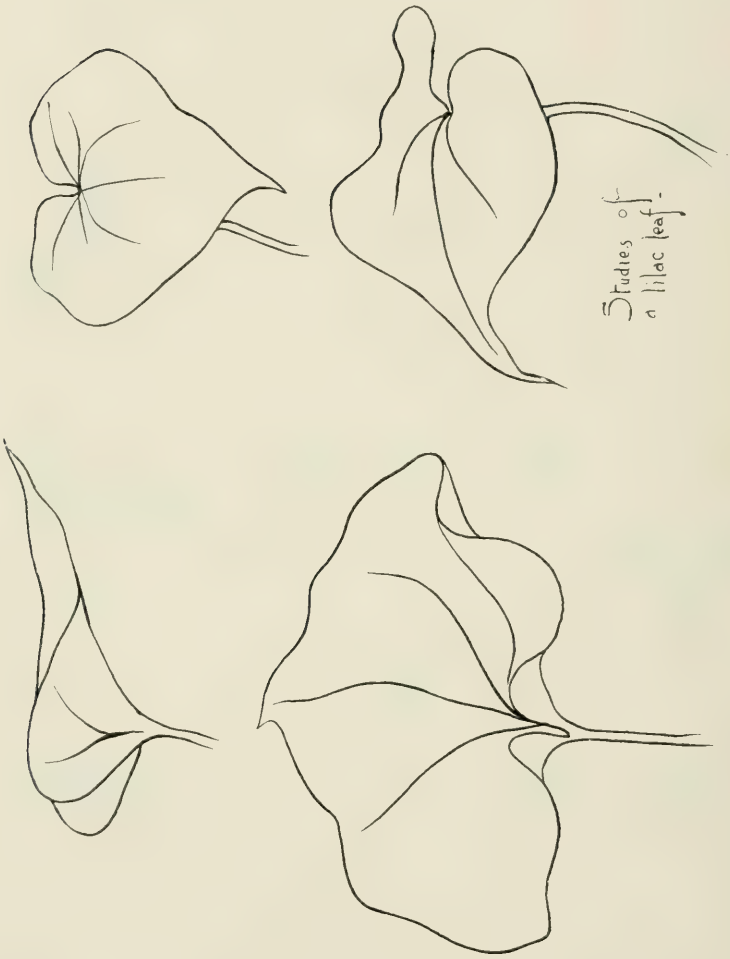
The class should then make a second effort.

After pretty good results have been obtained when the leaf is seen edgewise, the pupils should try it with the stem pointing



toward them, and then afterwards the apex may be turned toward them.

Repeated trials are necessary with each new position, but time spent in learning to see and to put down courageously what appears in these typical positions, is time well spent, and will


Studies of a lilac leaf.

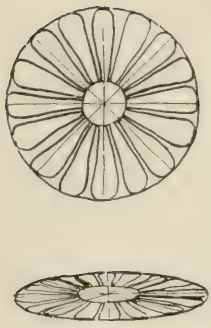


Figure 1.

influence all future nature drawing. Brush and ink are the first mediums to use in drawing these silhouettes, then the pencil and pen.

In higher grades where perspective principles are taught it will be useful to refer the foreshortening of leaves and flowers to the geometric figures. Lessons like the following will lead to clearer thinking, though in drawing from nature the aim should always be to record fearlessly and with feeling for the individual characteristics of the particular specimen in hand.

Have the pupils cut a circle, say three inches in diameter. On this circle sketch a daisy from memory. Of course it will be more or less conventional.

Now turn the circle so that the top appears an ellipse. Carefully sketch the ellipse and within the ellipse sketch the flower form. See Figure 1.

Next have a square drawn. Within this sketch a square

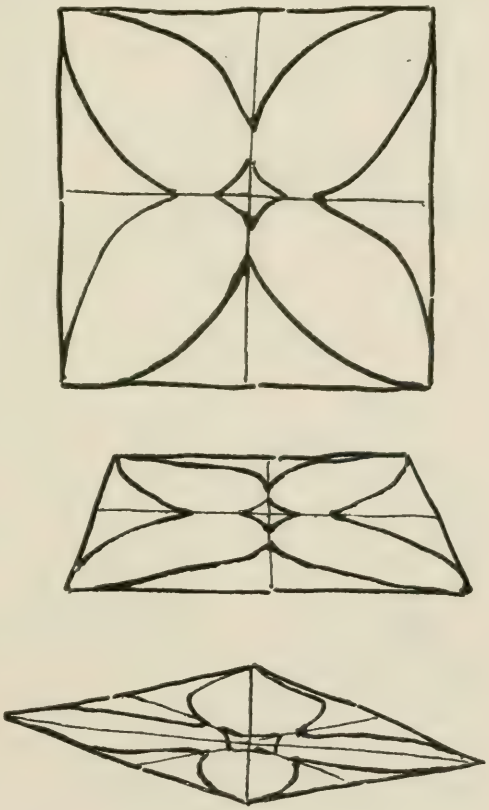


Figure 2.

flower, the bluet for example. Next study it in typical foreshortened positions, first drawing the square in correct perspective. See Figure 2.

A triangle may follow with a triangular leaf or flower drawn within and these studied in perspective. See Figure 3.

I have said that such exercises will lead to a clearer understanding of perspective principles as applied to leaf and flower. In drawing from nature the aim should be to see how the leaves and flowers look. Some pupils are ever ready to subject them to Procrustean tortures. They may be made as uncomfortable—perhaps more so—if forced into foreshortened beds as when made to lie unnaturally flat. The devices suggested are but helps by the way.

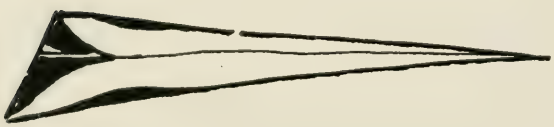


Figure 3.

CHAPTER VIII

SPRING NATURE DRAWING

PART I

WE ARE all pleased because good old Sol is showing himself for a longer time each day. Soon mother earth will respond to the warm rays, the buds will swell, and the stems and roots feel new life. All nature will take on that exquisite spring coloring and give forth that odor which we all anticipate. We begin to feel the truth of the words of James Russell Lowell in the first prelude to The Vision of Sir Launfal:

> "Then Heaven tries the earth if it be in tune,
> And over it softly her warm ear lays;
> Whether we look or whether we listen,
> We hear life murmur, or see it glisten;
> Every clod feels a stir of might,
> An instinct within it that reaches and towers
> And, groping blindly above it for light,
> Climbs to a soul in grass and flowers.
> The flush of life may well be seen
> Thrilling back over hills and valleys."

But while we anticipate all these changes and before they appear, let us begin our nature study, open the eyes of the children and be sure that we ourselves are in tune to this beauty and able to respond to it when it reveals itself.

Suppose we begin with the study of a tree or two. It is still too cold for a walk or field lesson, so we will take those we can best see from the schoolroom windows.

After a few words with the children, have a sketch made upon the board. What is the general form of the tree? What are the characteristic lines of growth? Have the pupils try again with pencil or ink. Let the children go to the window and try a sketch, or suppose you make a sketch that the children may

Studies of the Apple tree. First, the main lines of growth. Second, the tree with accessories, composed within a rectangle, and rendered in three tones of gray.

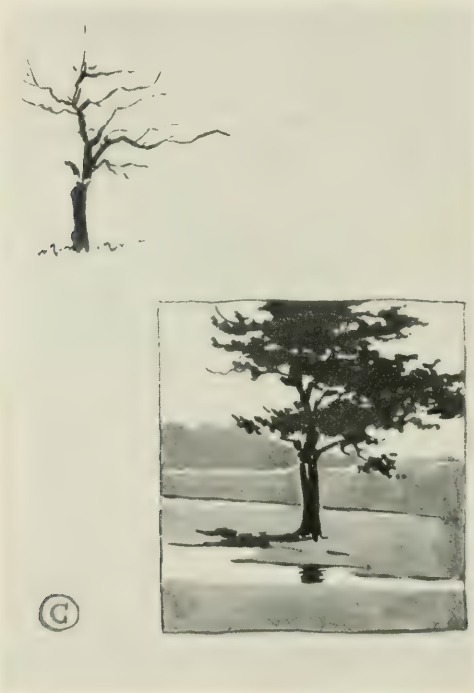
Studies of the Lombardy Poplar. First, the main lines of growth. Second, the tree with accessories, composed within a vertical oblong, and rendered in three tones of gray.

see how you work. Let them criticise your drawing. Be one of them in all your work. You will have some fine sketches next time, and in a few weeks we will try again when instead of bare branches and twigs we shall see

"An emerald roof with sculptured leaves."

In continuing the nature drawing, study the twigs from this or a similar tree. How bare and gray they are—yet are they gray? Suppose we consult the color scales we painted in the winter and see how full of color everything in nature is. We will sketch them now, and again later, noting the changes. One has but to begin his nature drawing and there is no lack of material or enthusiasm.

Let us be a little more careful this year about the quantity of material brought into the schoolroom and the use we make of it. Let it not be the result of the nature or the drawing lesson that there is such destruction of rare or common plants. A



few good specimens well chosen and well cared for answer the purpose better than such quantities selected at random and thrown away after every lesson.

Why not put into practice the good lessons we have had along these lines of art training this winter? We have been advised to "stand for reforms." Suppose we apply these to our nature drawing this year. The children may make drawings

faithful to nature but is that all there is to be gained? Is this production a thing of beauty as a whole? Some one says: "Nature is beautiful and that is a good drawing." Yes, but our composition may be ugly for all that and so nature be made to appear what it is not. Let us select the best specimen possible to tell us the story of the life of the plant or tree. You have

heard this again and again. How about the size and position of the paper for the specimen we are to draw? What shall we select for the inclosing form? Just where shall we draw it to give the best space divisions?

These and other suggestions must be considered if our results are to be good.

Then comes the decision as to medium and values. You cannot design nature, to be sure, but your sheet may be a good design when finished.

Apply your lessons in composition and landscape drawing to the sketches of the trees, your lessons in space division and

balance to all you do in nature drawing, never forgetting simplicity in composition and in treatment.

Now comes the study of the seeds and their growth. Soon the farmers will begin plowing and sowing the seed. There

will be many things for us to observe then, but we can make better preparation for these in the schoolroom where we can make the observations more in detail. For example, take two sheets of blotting paper of good size, put the seeds between and dampen them, then place inside sheets of cotton batting to keep the seeds warm and moist. The early stages in growth may be observed in this way. A wooden box with one side removed and a pane of glass substituted gives a fine opportunity to study

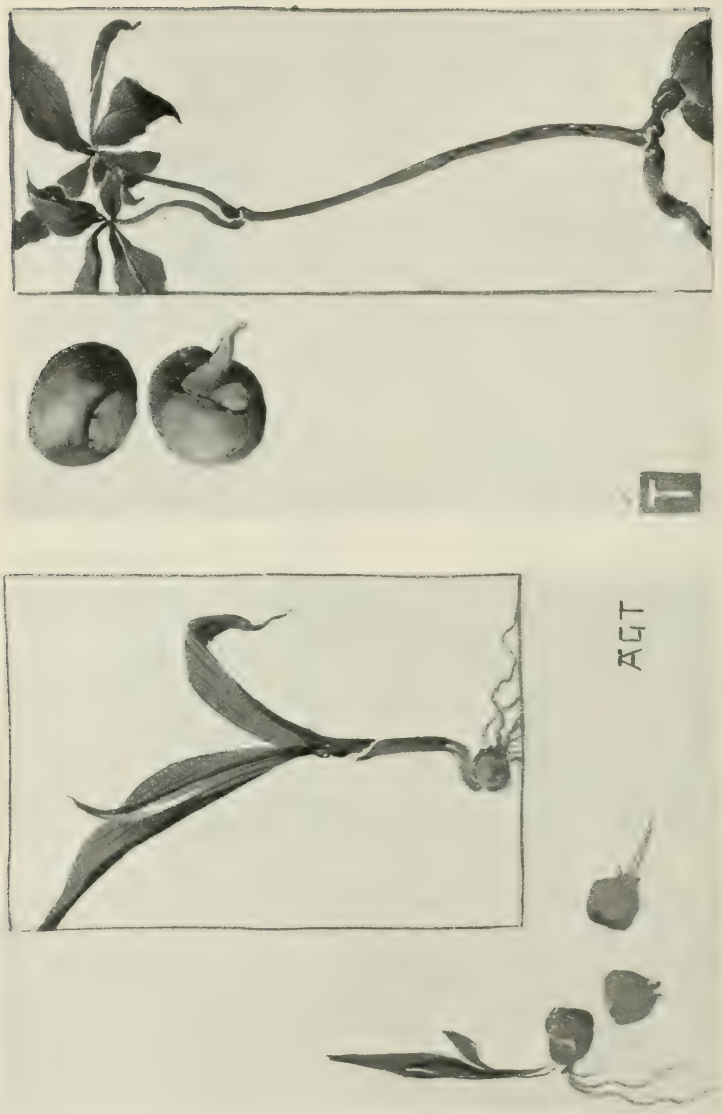
the growth, especially of the roots, and to make our drawings without disturbing the seed.

Plant the seed close to the glass in sphagnum or moss obtained of a florist. If these cannot be had, use sawdust or a

good sized box of earth, planting the seeds at intervals of five or six days.

A few illustrations will show some arrangements of the sheet which will tell the life history of the seed and at the same time suggest a lesson in composition.

Apply the color work as we paint, studying the scales, shades, tints and hues which one finds in the least of nature's creations.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These few suggestions for the beginning of the nature work may answer as stepping stones to the more interesting work later in the season, as well as open the children's eyes and hearts to love all seasons and all they bring.

"Spring is strong and virtuous,
Broad-sowing, cheerful, plenteous,
Quickening underneath the mould
Grains beyond the price of gold."
—Emerson

PART II

"There is a path that I would lead you by,
If you will trust yourself to me for guide,
A path that leads along the woodland side."

Now is the time for us to keep our eyes and ears open to the sights and sounds of nature. What a world of wonder is all about us, and the wise man is on the alert that he may not lose this glory.

Thoreau in his chapter on spring wrote:

"When the ground was partially bare of snow, and a few warm days had dried its surface somewhat, it was pleasant to compare the first tender signs of the infant year just peeping forth, with the stately beauty of the withered vegetation which had withstood the winter,—life everlasting, golden-rods, pinweeds and graceful wild grasses, more obvious and interesting frequently than in summer even, as if their beauty was not ripe till then."

If you will take a walk along any country road, or perhaps look about your own dooryard, these very illustrations of new life and old age may be seen side by side, each enhancing the beauty of the other. Let us compare the new and the old in a few of these specimens. Study the tansy for example. There are the fresh green leaves with their red stems, just the colors we were studying a while ago as illustrations of complementary harmony. There, too, is the stately stalk of last season showing the ambitious child to what stature it must attain. A little farther on is a bit of dock with its long, slender leaves pushing up through the sod, and here and there a stem of last year's growth, just enough to accent the fresh, delicate coloring of the new leaves. Many illustrations of this kind will be found when once we have started on our search, and there is no end to the delight in such a ramble.

We will have specimens brought into the schoolroom. These will necessarily vary with the location, but many a new friend as well as the old ones will appear. There will be first of all the skunk cabbage, the new growth appearing bright and green in contrast to the brown and gray surroundings. There will be the golden-rod, grasses, sedges, hepatica, chicory, evening primrose and many others all displaying color which will be a revelation to many a child and to many a teacher as well. There will be found the red, brown, gray and violet stems of the blackberry or raspberry vines harmonizing with the green or yellow of the new growth; the gray soft spirals of the ferns, with here and

there a yellow fern of last season still showing its delicate fronds.

Can we not make this work one means of helping the children to live as well as of fitting them for life?

Nature has always been our best teacher and must not be shut out of the schoolroom.

After studying these for a while we will make use of them in our drawings, making a few sheets to illustrate what we have discovered.

First of all make a careful selection from what the children have brought, remembering both the scientific and esthetic value of the work. Among other things to be considered is the personality of the plant, each plant as well as each person showing characteristic traits. Observe the lines of growth, measures, balance or symmetry, variety, radiation or any other feature which will help in understanding this particular plant and the placing and drawing of the specimen. A few lines (see page 65) will answer as illustrations.

Let the children in the lower grades take the simplest plants in which this new life is manifest, for example, "Grass with green flag half-mast high." They may use the colored pencils or perhaps the brush and color for this expression. After drawing go to

nature more thoughtfully and see what might have been done to make this expression more truthful and beautiful, each observation giving a keener sense of beauty, and greater love for nature. In the middle and higher grades let the pupils decide for themselves what paper and medium are best adapted to the

particular lesson. It is not necessary that each pupil should have the same size and color of paper and the same medium, and the pupil often appreciates this fact.

This work may be presented in a variety of problems. First. After making the drawing in pencil outline, or with colored pencils, water colors, or ink wash, cut down the paper to the proper size and form for an inclosing space, mount this upon a second sheet to obtain good margin.

Second. After selecting the specimens draw a suitable oblong to inclose the drawing, limiting the pupils to this space and necessitating thought in placing to obtain a well balanced composition.

Third. Make a pencil sketch within a given space, and in the margin arrange in a scale the tones found in nature. Later have the children sketch upon the board, from memory, characteristic lines suggesting the growth of the plant studied. Continue the nature drawing using these plants, noting the changes which occur, the manner of development, change in color, form and size. Presently the flowers will appear suggesting new lines of study in our nature work and drawing.

In connection with these lessons do not forget the literature, for the poet as well as the artist has often found his inspiration in these simple bits which speak so joyfully of returning life and beauty.

Ruskin said, "He who walks humbly with nature, will seldom be in danger of losing sight of art."

Agassiz bade us "Study nature, not books."

Let us heed the counsel of the artist, author and scientist and make our nature work tell in each line.

Jean Ingelow wrote of "Ferny plumes but half uncurled."

Sidney Lanier said, "The little green leaves would not let me alone in my sleep."

Wordsworth in writing of this season, said,

> "The snow's dissolved, and genial Spring returned
> To clothe the fields with verdure."

Bryant wrote of the buds that,

"Patient and waiting the soft breath of spring
Feared not the piercing spirit of the north."

See with Emerson how the spring is

"Teaching barren moors to smile,
Painting pictures mile on mile."

Take the advice of Keats and

"Linger awhile upon some bending planks
That lean against a streamlet's rushy banks,
And watch intently Nature's gentle doings."

The drawings accompanying this article were made by pupils in the Salem, Mass., Normal School.

Sketches illustrating characteristic traits of plants.

CHAPTER IX

DRAWING THE SPRING FLOWERS

WHEN spring comes on "with bud and bell" it is time to refresh our souls by reading again our favorite nature poems and journeying about out of doors with Wordsworth, Emerson, Whittier, Bryant, and the many friends who have put themselves on record as nature lovers and who help to quicken our vision. They have said for us what we would like to say.

The coming of spring with the flowers that make up her crown, has inspired a wealth of good things both in literature and painting. How many of these do the children know? Let us put up the pictures of blossoming fruit trees, Aurora, and those of the master painters showing Flora and the flowers springing up all over the ground, just as they like to make them in their own humble efforts, and let us read again and again the gems of literature, some of which they may commit to memory. They will see the daffodils out-dancing the waves in Wordsworth's "I wandered lonely as a cloud," and hear the owls hoot to his boy of Winander.

We all have our favorite nature poems and of course we teach best those we enjoy the most, but if we can help the child to realize his right to fellowship with the artist, the sage and the poet, because of his own love of nature, we have done him a priceless service in the way of happiness. Something of this may blaze the trail and make the approach to our schoolroom study of plant life radiant.

The children are quick to discover the flowers whether they come slowly one by one or trooping all together and are glad to draw and paint anything from the first blade of grass to the fallen leaves. It is our mission to help them to love everything that is fair—"the shape of the opening rose, the changing ripples on the waves, the grace of the human form," and to feel as well

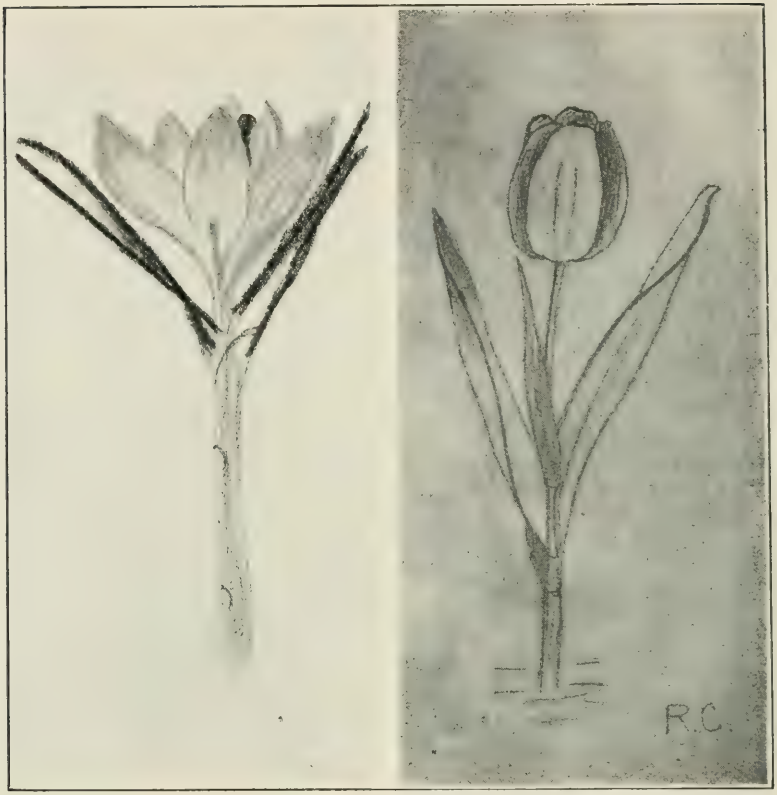
the power of beauty which even the humblest flower holds and gives back "in looks so like a smile."

Surely, nothing gladdens the schoolroom like a pot of daffodils or a bunch of well-arranged flowers, and since the flower is the type of all that's fair, nothing is more worthy of study.

It becomes our great concern to direct the drawing so that the children may pursue it with delight and benefit.

First, then, what shall we choose to draw? How may it be arranged? What medium shall be used? How may we teach and how may we criticise the results?

We have caught the bulb fever, so the nature work in our primary grades starts off with bulbous plants. The flowers are brilliant in color, positive in form and carry well across the room. The children have drawn with good success the crocus, the trumpet narcissus, the double daffodil, the red, pink and yellow tulip and the hyacinths.



We choose a good specimen and arrange it so that its outline can be distinctly seen against a white background and in good light, then we have the children come closer for study and to see us make the picture, first on the blackboard with colored crayons to show them what to think about, how to represent the form of the flower and blade as well as how they grow; then we draw again on paper with colored crayons or water colors just as they are to make their drawings.

Before the children start in, it is safe to have them tell what they are going to do and the order of doing. If they are to use

the brush, paint first the flower and not too near the top of the paper, then its stem and blades just as we see them growing.

When the drawings have been made we criticise somewhat as follows: Is the color right? Does the flower grow in the right way? Has it the right number of petals and are they placed as they grow? Is the drawing a good size and shape? Is the stem the right size for the flower? Are the leaves the right size? Are they tall enough and do they grow as they ought? Is the drawing well placed on the paper? The best results may be given an honored place on the wall for a day.

If the children are courageous and confident let them work first and show them how when they find they need a little teaching; sometimes this is a most effective way to proceed.

The Jack-in-the-pulpit, lady's slipper, oriental poppy, yellow garden lily, fleur-de-lis and the peonies may be drawn from one well-chosen specimen. The daffodil, tulip, crocus, Jack-in-the-pulpit, poppy, lily and fleur-de-lis may be drawn either with colored crayons or water colors, but the hyacinths, flowering almond, lady's slipper and the peonies are better drawn with the brush.

When the wild flowers come in abundance the second and third grade pupils can work from individual specimens; then each child must make a true picture of his own flower and for this he needs two pieces of paper, one on which to place the flower to see well its form and color and one on which to make the drawing. The 9″ x 12″ paper should be cut into halves, thirds or fourths to suit the size of the specimen. Several sheets of paper may easily be cut at a time against the sharp edge of a ruler.

The pussy-willow, the horsetail, the bluet, the cowslip, the violet, the robin's plantain, the blue-eyed grass and the clover are good subjects for this individual work. Children usually draw all except the cowslip and clover better with colored crayons than with the brush.

Whenever we plan to use the wild flowers they should be carefully cut the day before and nicely arranged so that the blossoms are not crowded and misshapen and all the stems reach the water; then they will be likely to keep fresh during the lesson.

Remember, too, that no child will do his best work if given a "scrub" specimen.

In the grammar grades we expect closer discrimination and put the emphasis on skill in representing the foreshortened appearance of flower, stem and leaf forms, the careful drawing of details, the expression by accent, and the study of color harmony as found in plant life.

The buttercup and wild columbine are excellent subjects for a series of progressive lessons because of the variety of forms found in leaf and blossom. For the first, let each child have a well-opened flower and make exact drawings of its forms, note and draw the shape of different petals, draw the front, side and various foreshortened views of the flower, then draw the bud forms. The many leaf forms unforeshortened and in foreshortened positions furnish ample material for several lessons.

When these details can be well represented the drawing of the spray goes easily. It is often well to repeat the lesson two or three times, placing the emphasis first on truth telling and next on accent, directing the pupils to make delicate sketches and when as correct as possible study to express texture, color values or light and dark in corresponding pencil values, being mindful of the importance due the flower. Study to have the lines lead to and center the interest there for if the accent is carried with equal emphasis from top to bottom a "spotty" effect is produced which is unrestful and distracting.

A well-sharpened No. 2 pencil is the medium for most of the work in grammar grades. A hard lead is unsympathetic and yields monotonous rather than expressive results.

The more carefully the drawing of plant form is made with pencil before the application of the color the better. Children should not be allowed time to color labored pencil drawings to which the school eraser has been freely applied.

Good results in drawing as in every other subject depend upon continuous hard work on the part of both teacher and pupil and the more so because beauty is the standard of judgment and results that look labored are not beautiful. Somehow then we

must work hard enough to get skill and freedom which alone, backed by fine feeling, will produce beautiful results.

The teacher who prepares the lesson by drawing in advance what the children are to draw is likely to inspire good work. We must take to heart the truth that children learn to draw by drawing and be careful to take no more time for our teaching than is necessary to start them with a definite aim and to keep them going on and on, one step at a time, towards skilful achievement.

Most of the drawing of flowers in grammar grades is related either to literature, science or design and directed from those standpoints. Sometimes we should draw because of pure delight in the flower itself.

Dr. Bascom has said that flowers are among the most direct and personal gifts of the Creator to mankind. Surely there is no better way by which we may come to appreciate the exquisite beauty of these gifts than through the study necessary to represent them. Then, indeed, do we realize the marvel of each creation.

It is certain, too, that the contemplation necessary for the successful drawing of flowers may greatly assist to cultivate a high standard of judgment and taste as to form, color, harmony and arrangement

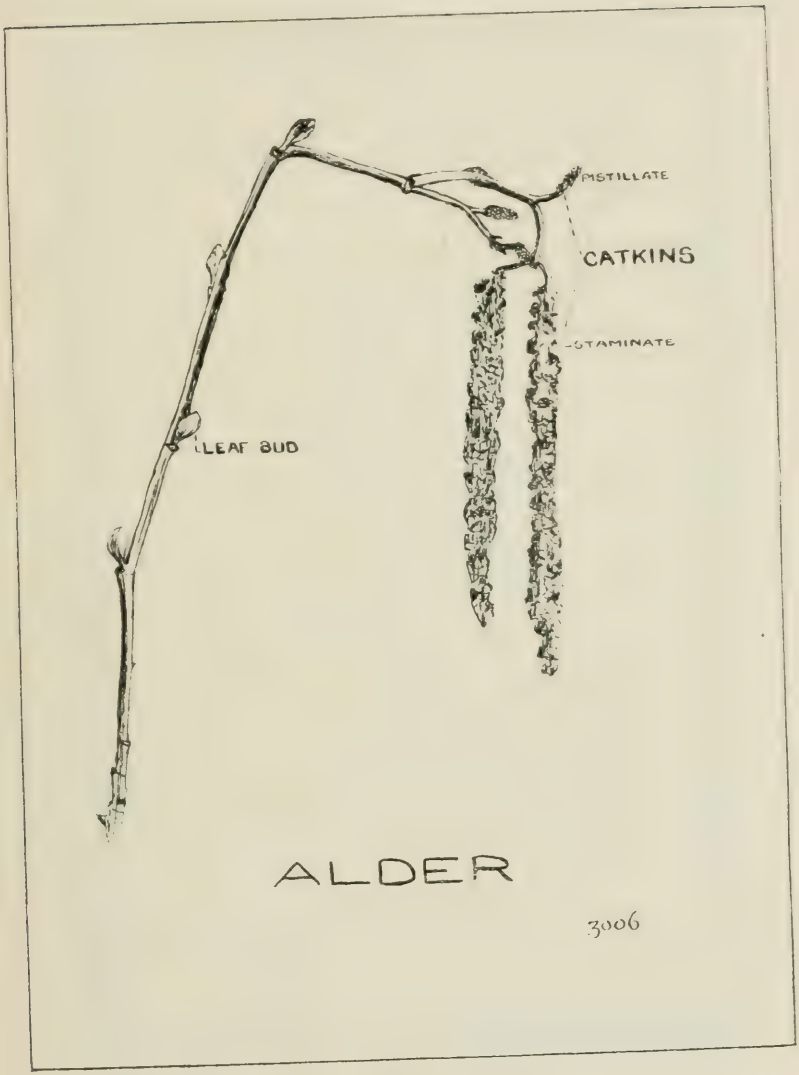
CHAPTER X

ALDERS, POPLARS, AND WILLOWS

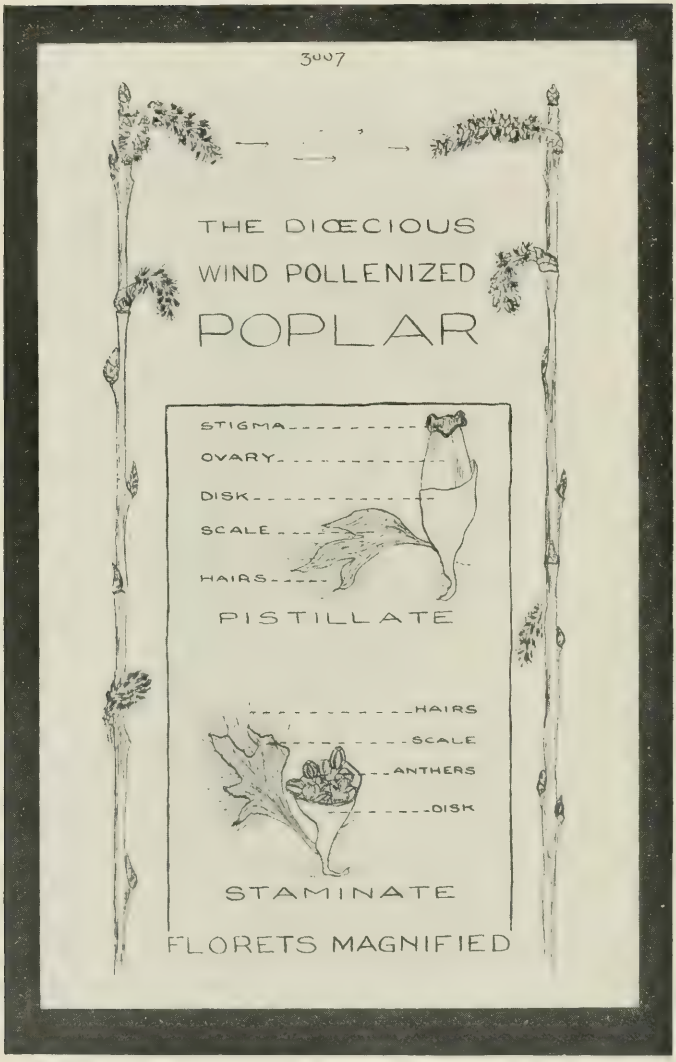
THE flowering branches of alders, poplars and willows are justly favorite objects for nature drawing in spring. They are among the earliest plants to give evidence of the return of the open season and they have grace of form and charm of color that appeal to every lover of the beautiful. They are moreover easy to obtain in abundance and to bring into the schoolroom where every pupil may see them close at hand.

It is a pity that so often pupils are permitted to draw these branches without any real understanding of what the various parts mean to the plant. There may be some value from the point of view of the drawing supervisor in the graphic expression of what the pupil sees in color and form, but it is only a partial interpretation that can thus be given unless the pupil knows the names and significance of the various parts. Such knowledge need not interfere with the best art expression of which the pupil is capable and it certainly will increase the educational value of the exercise.

The alder is the earliest of these three plants to come into blossom. The first mild weather of March or April causes the catkins to lengthen. By almost any pond or stream you can find twigs that show the condition represented in the accompanying drawing. The vase-shaped leaf-buds are scattered along the twig, each just in front of a distinct leaf-scar, while toward the tip are the small, more or less erect pistillate catkins which are destined to develop into the seed-bearing cones to be found on older neighboring branches. At the extreme tip of the twig are the larger and much longer pollen-bearing or staminate catkins which after shedding the pollen will fall to the ground. Sometimes branches will have only one sort of these catkins



An alder twig in the early spring.



A study of the poplar catkin.

present, but a little searching will generally reveal twigs which bear them both.

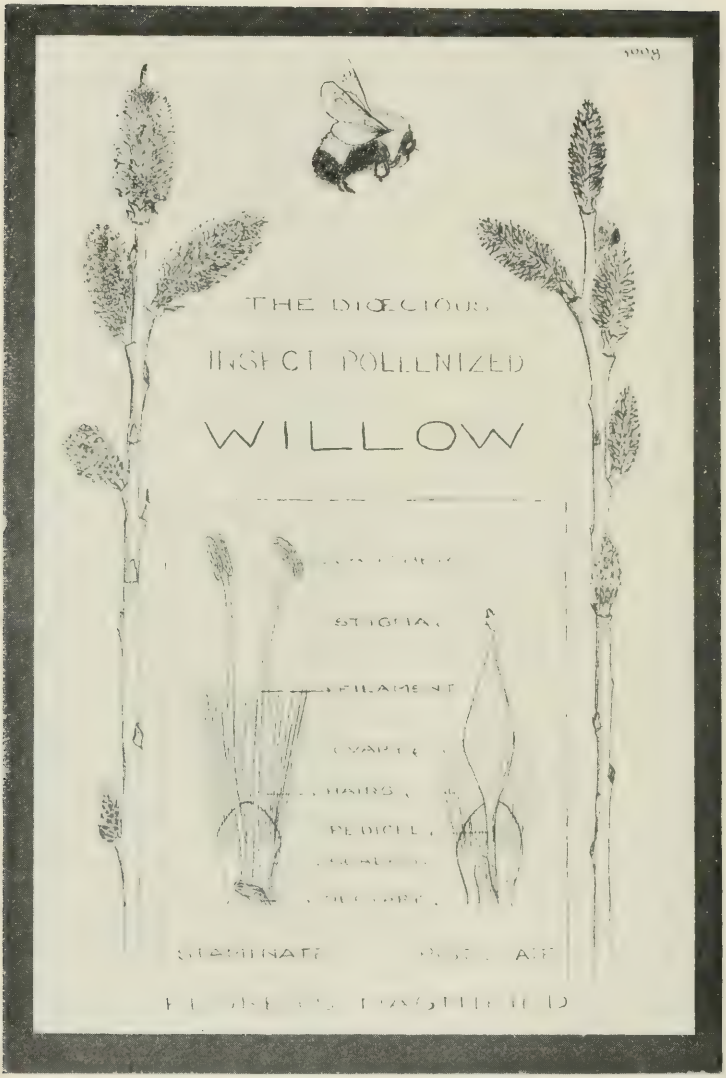
In the alder the pollen from the staminate catkins falls upon or is blown by the winds upon the seed-bearing catkins, fertilizing the ovules and thus causing the formation of the seeds. When such a condition exists—the pistils and stamens being in separate flower heads upon the same plant—the species is said to be monoecious.

In the case of the poplar, a somewhat different condition will be found. Upon one tree pollen-bearing catkins only are present while upon another tree only seed-bearing catkins are to be found. Such a plant is said to be dioecious. Evidently in this case the pollen must travel from one tree to the other in order that the ovules may be fertilized and develop into seed.

If you will pull apart one of the little florets that make up the pollen-bearing catkin of the poplar and look at it through a lens you will see a condition represented in the lower part of the accompanying poplar plate. Each floret consists of a hairy scale in the axis of which rises a curious stalked disk that bears many stamens consisting of pollen-bags or anthers upon very short stalks or filaments. A little study of these anthers will show that they contain a very light dusty pollen and that when the anthers open they do so with a tiny explosion that sends the pollen out as a cloud of dust that will be wafted away on the slightest breeze. If now you examine also one of the florets of the seed-bearing catkin you will find a condition shown on the middle of the poplar plate. A hairy scale similar to the other is found with a disk that bears only a single pistil which consists of a large ovary and a large stigma. Upon this stigma must be blown some pollen grains if the ovules within the ovary are to be fertilized.

The alder and the poplar are wind pollenized plants and so they have no nectar, or odor, or very conspicuous color. The stigmas are well developed and the pollen is light and fine.

The attractive catkins of the pussy willows develop at about the same season as do the poplars. A little observation will



Catkins of the pussy willow.

show that here also we have the pollen-bearing and the seed-bearing catkins on separate plants. A single floret of the former is shown at the left of the middle in the accompanying willow plate. At the base is a hairy scale which bears a curious greenish nectar-spur on which you can often find a drop of transparent nectar. Back of this rise the two stamens with long filaments and well-developed anthers that hold the somewhat sticky yellow pollen. On the other side of the same plate is shown a single floret from the pistillate catkin. Here we find the hairy scale and the nectar spur, but in place of the two stamens a stalked pistil consisting of the stalk or pedicel, the large ovary and the rather large stigma at its tip.

In the case of the willow, the sticky pollen, the nectar, the odor and the more conspicuous color all indicate that insects rather than the wind are depended upon to carry the pollen. And if some warm, sunshiny afternoon in April or early May you take your pupils to a group of blossoming willows you will see small bees, large bumble-bees, and various butterflies gathering nectar or pollen or both and unconsciously carrying many grains of the latter from the stamens to the pistils.

When the pupils have thus seen the significance of these twigs you are asking them to draw they surely should be able to make the lesson a more vital expression of their personality*.

*I am indebted to Miss Alice Manning of the Class of 1906, Lowell Normal School, for the drawings on these Plates

CHAPTER XI

NATURE DRAWING AND COMPOSITION

SELECTION OF SPRAY

A DRAWING of trees, arranged as are those in Figure 1, No. 1, gives a result much the same as that produced in music when one strikes at regular intervals but one note on the piano. In a musical composition there must be a variety of tones; in a written essay different words are used, and in making an interesting picture it is generally more satisfactory to use several forms rather than to repeat one monotonously. The artist would pass by a scene in the country similar to that suggested above and perhaps continue until he found a subject more like the lower sketch in Figure 1, where the eye is not wearied by the monotonous repetition of one form.

The child who brings to school a spray of the same general character as those shown in Figure 2 is handicapped at the start. It is better to select a plant form which has a variety in the size, shape and arrangement of its elements. Such plants are abundant by the roadside; for example, the woodbine, grapevine, golden-rod, seed pods, etc.

Notice in the sketch of the woodbine, Fig. 12, No. 1, how varied are the leaves in size and position, how the stem changes its direction at every joint, how the berries grow singly and in clusters, and if we are to work in color, how much more interesting is the varied color in the woodbine, the green and red leaves, red stems and blue berries, than the repetition of the same leaf in the same color,—green!

SELECTION OF THE MOST INTERESTING PART OF THE PLANT

It often happens that it is not desirable to draw or paint the whole of the plant which the child has on his desk. It may be too large, Fig. 11, or a part of it may be uninteresting, or there

may not be sufficient time to make a drawing of the whole, Fig. 7. When this occurs, the pupil should select the most interesting part and draw that. It would seem that the energy of the plant is devoted to rearing the flowers into the air where they can be seen, and apparently nature has answered for us the question as to what is the most interesting part of the plant. But occasionally there is more beauty in the form and color, in a group of leaves or other parts of the plant than in the flowers. It is a new problem with each plant, and one which the pupils can be encouraged to carefully consider.

Figure 1.

SELECTION OF ASPECT—POINT OF VIEW

Have you ever watched a class of beginners in nature drawing? Each member of the class has a spray to draw. The word is given to place this spray on a sheet of drawing paper on the left side of the desk. This being done, a uniform movement is noticed all over the schoolroom—the pupils are "ironing out" their plants. Each leaf is carefully separated from its neighbors, all wrinkles are removed, and then with the palm of the hand, any remaining spirit which the plant may possess is quietly but firmly crushed out. Perhaps some small boy, more discerning than the rest, will slyly slide his spray into his geography and sit on the combination for a moment. All are working for the same end, getting their plants "ready to draw." The results

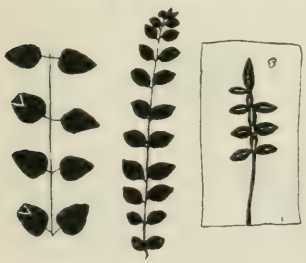


Figure 2.

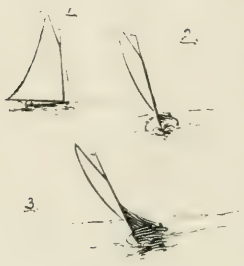


Figure 3.

on paper will be so many maps, Fig. 6, No. 2, of the vanquished plants, drawings without the life, vitality, grace and charm of the living thing.

Which picture of this boat, Fig. 3, do you prefer? Probably you will select No. 2 or No. 3, because they have more go in them, that is, more movement, more life. There are more curved lines in these drawings than in No. 1, and more interesting light and dark and spacing.

Before an artist would attempt to paint a finished picture of boats he would make many sketches and studies of them in all positions. Before the pupil can adequately represent plant life, he must draw single leaves and flowers in various positions.

For this lesson avoid leaves having such irregular outlines as the maple. The plantain leaf is a good one to begin with; it is simple in contour and is pliable when on the desk. Discourage any attempts to represent veins, lest the whole be sacrificed in meaningless detail, as illustrated in the pupils' drawings in Figure 5.

Figure 4.

It is easier to draw boat No. 1 than either of the others, and it is easier to draw a flattened out leaf than one which appears foreshortened, but after a few lessons in leaf per-

Figure 5.

spective there is no excuse for ironed out drawings. Each pupil should so arrange the parts of his plant that a naturalistic effect may be secured as it rests on the paper on the desk, Fig. 11.

A DOMINANT PART IN THE COMPOSITION

There is always one principle element or group in any work of art. This element is generally made the more intelligent and beautiful through the use of consistent accessories.

In our nature drawings we can avoid having two groups of foliage of the same size and importance by picking off a few leaves from one of these groups. The eye will rest with satisfaction on the dominant group if we emphasize it in some way, as by drawing it even more carefully and with stronger lines than the subordinate parts, see Fig. 8. Notice that a certain part of the plant shown in Figure 7 was selected as being the most interesting, and that this selected part is made to hold the attention of the spectator through the use of stronger lines, and by subordinating the other groups of leaves and blossoms. As illustrations of poor arrangement see Figure 6. No. 2 has two elements of equal size and importance and the eye goes restlessly from one to the other, as the attractive force is equal in each. In Nos. 1 and 4, the attention is called to each spot and there is no group of sufficient strength to retain the interest for any length of time.

If we use a background in working in color it must be of a quiet tone that it may not assume too important a place in the picture.

It is excellent practice to have the pupils select the dominant elements in stories, buildings, pictures, etc.

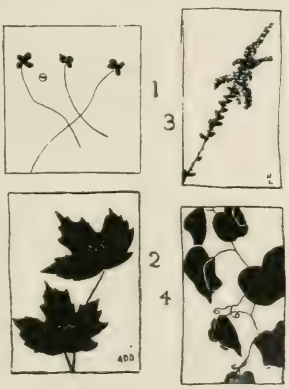


Figure 6.

PURPOSE, SHAPE AND SIZE OF FRAME

When one has spent a day in the country and has returned with a little sketch, the natural impulse is to place it on the wall in the house, where it may receive due consideration. If this

Figure 7.

background be a figured wall paper the modest message of the sketch has but a very poor chance of being heard. It is as if a hurdy-gurdy should be played in one corner of the schoolroom during a recitation. If we wish to enjoy our sketch we must in some way lessen the din which the background is making. One way to do this is to put a mat or frame between our work

Figure 8.

and the wall paper, as shown in Figures 9 and 10. Ruskin says that a frame is "a little space of silence," surely a good definition here. Our nature drawing will often appear to a better advantage if we inclose it in a frame or geometrical outline, leaving a surrounding margin of blank paper. Decide how much of your plant you are to include in your drawing and what frame will best inclose this portion of the plant. Does it fit in a long, slender oblong, in a wider one, a square or a circle?

As we have said, it is not at all necessary that all of the plant be included in our drawing. It is often better to omit

Figure 9.

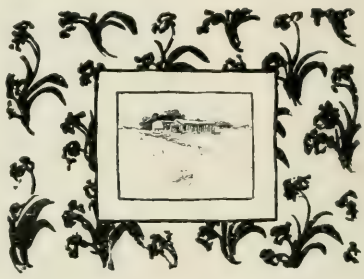


Figure 10.

the ends of leaves and stalks, or other parts, drawing our line around the plant, and, passing the pencil over these outside portions, continue the outline of the frame, as shown in Figure 11.

ARRANGEMENT IN THE FRAME

In an upper grade class room, the pupils selected a drawing similar to the sketch, Fig. 12, No. 1, as being one of the best arrangements made during the lesson. One boy demurred and said that it was growing "upside down." The class agreed that a sketch like No. 2, so placed upon the wall, would be as wrong as would No. 3. Further questioning brought out the fact that the woodbine oftentimes grows on piazza posts and rails as shown in No. 4, and that if we were to select a bit of the growth, say that inside the oblong in No. 4, it would apparently be wrong side up. But this is the natural growth of the plant,

and so what seems, at first thought, to be wrong side up, is right side up for that particular plant. And the characteristic growth of the plant is best shown in a drawing of this kind. In fact many plants, if drawn with the stalks and leaves growing upwards, would be incorrectly represented.

The woodbine apparently grows in from the frame, and in some places it seems to grow out again. This arrangement suggests that the whole life of the plant is not shown, that it has roots and other elements, and that the artist selected the part which appealed to him. See also Figure 13, and compare with the floating violets in Figure 6, No. 1. (Violets never grow this way—except on doilies.)

Figure 11.

Another way to suggest that the drawing is a representation of but a part of the whole growth is shown in the reproduction of the Japanese print, Fig. 13, where the artist has allowed the drawing of the stalks to gradually fade away. This is the plan followed by photographers in vignetted prints.

We will now arrange our plant so that it shall appear to grow in from behind the frame, and we have decided that it is wise to have a dominant element in our composition. There are certain principles relating to the placing of the elements in a picture which are generally recognized as tenable:

(1). They should be so placed as to obtain *variety* and *rhythm* in the spacing,—a consistent movement in the size of the spaces from the largest to the smallest.

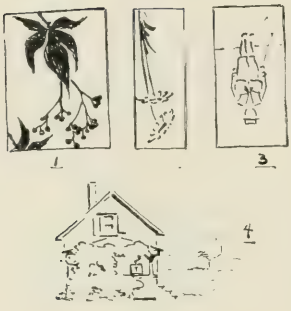


Figure 12.

A single mass placed mechanically in the center of the space, or the bisection of a space by vertical, horizontal or oblique lines, produces monotonous spacing. (Figs. 2 and 6, Nos. 2 and 3.)

(2). The *forces* in a composition should be so arranged that they *balance* one another with regard to a common center. This common center is the center, or a little above the center of the inclosing line of the picture.

Each spot of light or dark or color is an attractive force. The force of a spot is dependent upon its *measure* (area) and its *contrast* with the surrounding tones. *Equal forces* balance on any straight line at *equal distances* from the center. Two forces, equal in measure and contrast, or, a small mass strongly contrasted with the ground in color or value and a large mass of less contrast (two equal forces), will balance each other at equal distances from the center.

Unequal forces balance each other on any straight line, when their *distances* from a given center *vary inversely as the forces;* e. g., a force near the center may be balanced by a smaller force more remote from the center, Fig. 1, No. 2, and Figs. 9 and 13.

CHARACTER OF THE LINE OF THE FRAME

Our art store windows have photographic and other prints encased in frames of brown, black, gray or gray-green, in accord with the prevailing tones in the picture. "Harmony is a consistency in character."

An ink drawing in a pencil frame is not consistent in character, and the pencil outline is not generally strong enough to state, "Here is the drawing." A pencil drawing in an ink frame is not only equally inconsistent but states positively, "Here is the frame." The picture is the dominant element, the thing to be seen.

In working in color, choose some grayed or subdued tone, which is an echo of some color used in the picture, and go over the line of the frame with that color: then there is a relationship in color between the picture and frame.

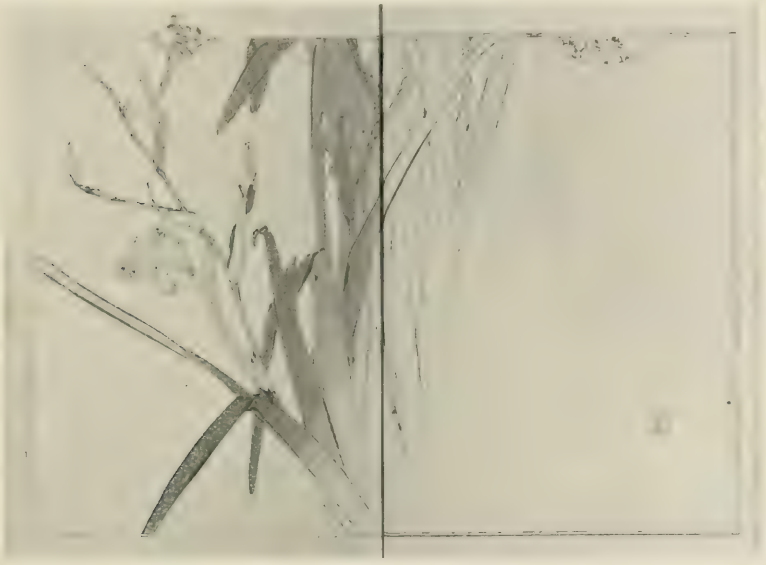


Figure 13.

THE SIZE, PLACING AND COLOR OF THE INITIALS

The reverse side of the sheet is the place for the pupil to put his name, age, grade, date, school and other necessary (?) information. The spectator's interest in the drawing should not be disturbed by the pupil's autobiography. Moreover, writing of this kind on a drawing is as much out of place as it would be on the work of an older artist. Look over the pictures in the text-books and those upon the walls and see how the artists have very carefully subordinated their signatures. Sometimes in school the name overwhelms the drawing—decorated signs instead of signed decorations.

We are to acknowledge our work in a modest way by placing our name or initials, not on the frame, nor outside of it, but in the right place on our picture or decoration. We are to place this signature that it will be an added decoration. Look at the Japanese print, Fig. 13; in the lower right part you will find the artist's signature. He carefully considers the balance of his composition, and if the forces seem too strong on either side, or the top or bottom, he places his signature on the opposite side as a counteracting agent.

A Japanese signature is placed in a small oblong or circle, corresponding in general shape to the unoccupied portion inside the frame which is to hold it. It is a part of, yet quite separate, from the drawing. What has been said above regarding the character of line of the frame is applicable to the color and line of the little frame for the initials —if they have one—that the whole may be consistent.

CHAPTER XII

DECORATIVE ARRANGEMENT

A STUDY from nature should be an expression of character. It is of value in proportion as it presents essential truths of color, form, and structure, and should be so placed upon the sheet as to suggest the natural position and growth of the original.

If it is to serve a decorative purpose, something more is necessary. Whatever beauty it may possess in itself, it must be brought into the best possible relation with its environment. A decorative arrangement then, involves: the adaptation of subject and inclosing form, and such a placing of the subject as will secure a balance of the masses represented, and an agreeable variety in the division of the space. The inclosing form must be consistent with the subject in shape, size and proportion. See illustrations on pages 90, 91 and 92.

The apple branch appears to greater advantage in the square 1, than in the oblong 3, but the circle 2 is best adapted as an inclosing form. A comparison of 4 and 5 will show that the space in 4 is not well filled. The square in 5 is a better size for the material contained. The effect of 6 is more satisfactory than that of 7, because the oblong is of better proportion for the subject.

The division of space is good in both 8 and 9, but 9 is the more satisfactory because it gives the greatest space where it appears most needed. The end of the branch is too near the lower margin in 8. The other suggests more freedom. So that arrangement is most reasonable which allows most room in the direction in which the subject would grow or develop.

If a spray is to be used in the decoration of a cover, gift card, or calendar, the one consideration which must govern its selection is that of appropriateness. Let the decoration be

1

2

3

4

5

consistent with its use. The title, inscription, or pad, is an important feature in the balance of the whole, but the initials or name of the designer should not occupy an important place. In the work of the little people, the use of the initials as an element

in the balance may be encouraged, but as our work becomes more dignified, let us be professional. The artist adds his name to his picture or decoration in an inconspicuous place; not as a part of the composition, but as a means of identifying his work.

Such suggestions can be appreciated by pupils of the lower grammar grades, and if wisely presented, will lead to intelligent work.

An excellent first step in the teaching of this subject is to show pupils examples of good decorative arrangements. And

these should be the best obtainable: drawings, Japanese prints, cover stamps, etc. Foot pieces clipped from old magazines are helpful. Those in 10 are from the collection made by a pupil, and are of the right sort. Such things are incentives to good work. Nothing inspires young people more than to feel that they are engaged in doing the same things as men and women in the world.

After the discussion of whatever illustrations are at hand, fasten several sprays or branches against the wall, or attach them to a background of stiff cardboard and place at a convenient height where they can be readily seen. Have a number of cardboard mats with openings varying in shape, size and proportion. Place each of these so that the opening will inclose

8

9

the whole or a part of a specimen, and let the class choose the opening best fitted to each subject and decide its position. At another time, have pupils practise on the desks with simple specimens, using four strips of paper or card to make a frame which may be modified in size or proportion to fit the twig or spray. Repeat, using drawings from nature in place of the sprays. Afterward, have decorative arrangements drawn in appropriate spaces, using pencil, brush and ink, or color. A drawing which is not wholly satisfactory in its arrangement, may sometimes be improved by cutting down the paper on which it is made and mounting it on a sheet of different tone. The result of this treatment is shown in 11.

In these suggestions, we have considered only the adaptation of the inclosing form to the material contained. The adap-

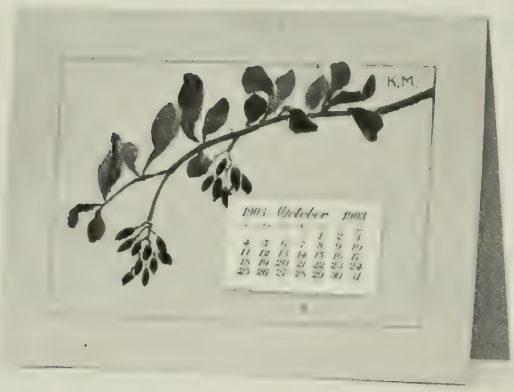
10

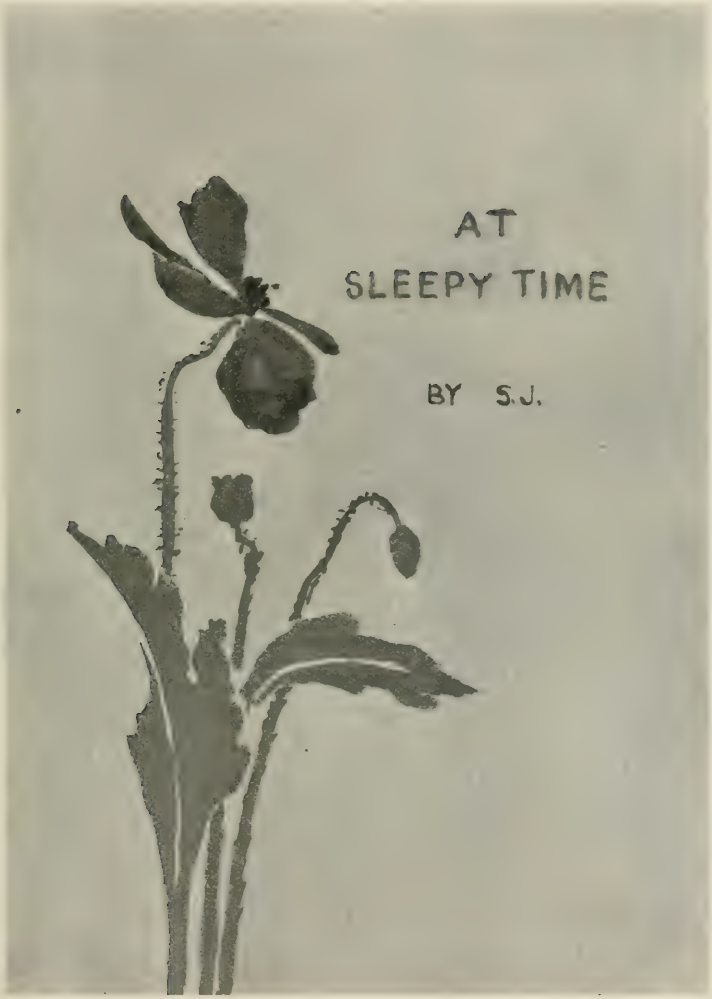
A drawing which has been trimmed and mounted on a sheet of different tone.

tation of the branch or spray to the inclosing form by modification is a more difficult problem, to be undertaken in higher grades.

The arrangement in 12, 13, 14, has been repeated by tracing. In 13 a middle tone has been used in addition to black on a white ground, and 14 shows the same tones on a ground of gray paper. Such an exercise gives excellent training in the adjustment of tones.

The decoration on the calendar, 15, is appropriate to the month.





16. A design for a cover, from the poppy.

17. A cover for a gift book, by a fifth grade pupil.

The design for a cover, 16, was made from a live poppy, after studying the cover stamp on "Bartlett's First Steps in English." In a fifth grade room, one spring morning, the teacher had been reading to the children from Longfellow's "Flower-De-Luce," and asked them to select lines from the poem which might be used with a drawing of the flower to decorate a cover suitable for a gift book. A large jar filled with blossoms of the blue flag stood on the table. These were distributed. From the covers made by the class, 17 was selected as one of the best.

Children readily learn that the important lines in a composition must not divide the space equally, and that the most important mass should not occupy the center of space; but to lead them to appreciate that subtle variety in the divisions of space, and those relations of masses and tones which result in beauty, requires much patient help by the teacher and continued practice by the pupils. But this work is do-able on the pupil's plane, and it is worth while. If we help to refine the children's taste by leading them to see relations, our work is in harmony with the best that is done.

CHAPTER XIII

DECORATIVE ARRANGEMENT

THE secret of naturalistic arrangement having been learned by the pupils, their next problem is decorative arrangement. In naturalistic arrangement the designer's first thought is for the flower, that it may appear at its best within a given space. In decorative arrangement his first thought must be for the space itself and its subdivisions. The aim is not a picture of a flower, but rather, as Mr. Dow puts it, "an irregular pattern of lines and spaces, something far beyond the mere drawing of a flower from nature and laying an oblong over it."

In decorative composition "there is no intention of making a design to apply to anything as decoration, hence there need be no question as to the amount of nature's truth to be introduced. The flower may be rendered realistically, as in some Japanese design, or reduced to an abstract suggestion, as in the Greek, without in the least affecting the purpose in view, namely, the setting of its lines into a space in such a way that beauty shall result."*

Mr. Dow still further defines the problem when he adds, "It is essential that the space should be cut by the main lines . . all the lines and areas must be related one to another by connections and placings so as to form a beautiful whole."

A thoughtful reading of these concise but far-reaching declarations will reveal the three prime factors in every problem in decorative arrangement: Irregularity of pattern, interrelations of lines and spaces, unity of effect. But the teacher's problem, the teaching of decorative arrangement,—that has not, as yet, been so helpfully set forth. Perhaps nobody knows enough to do it. Meanwhile we must go on with such light as we have.

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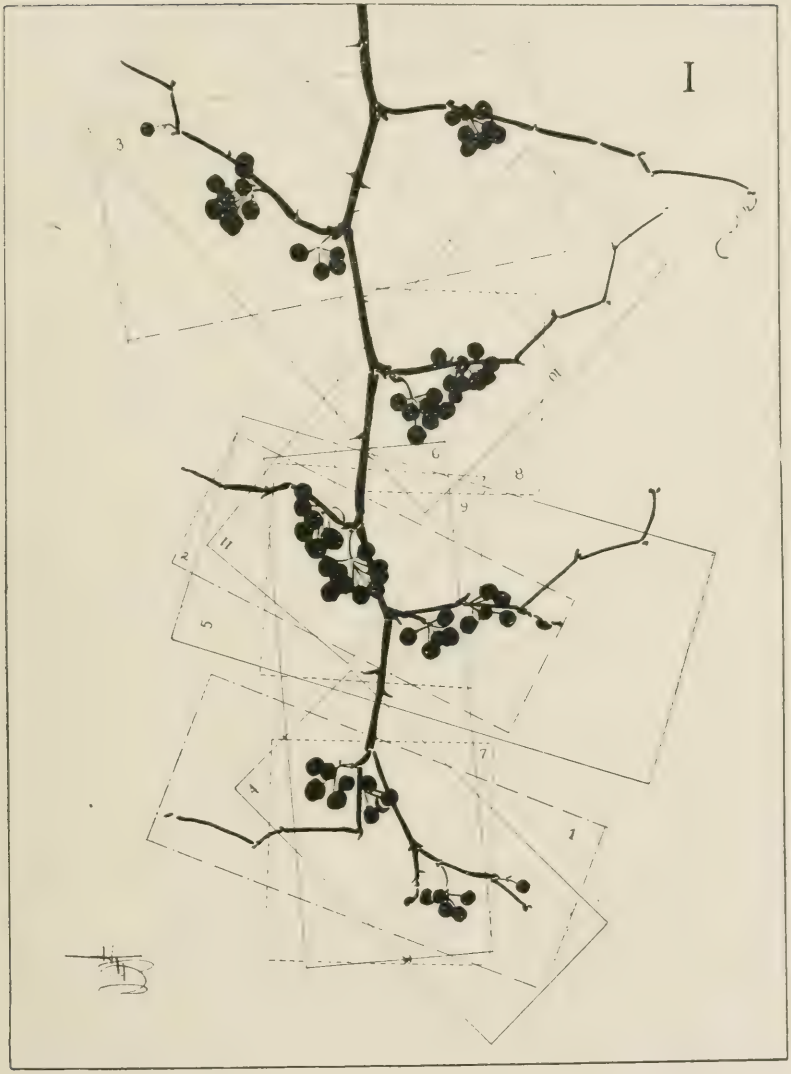
*Composition, by Arthur W. Dow, p. 46.

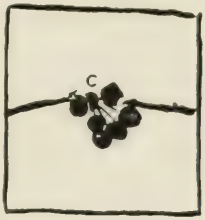

I

Of one thing we are beginning to be sure, namely, that decorative arrangement cannot be taught by rule, nor from copy alone. We are equally sure of another thing, namely, that it should not be attempted in the lower grades. A certain maturity

of mind is required, a capacity to experiment, weigh, choose, a sensitiveness to proportion and beauty of line. Given, then, a class of seventh grade pupils or pupils of any age beyond that, something about decorative arrangement may be taught by a method similar to that which I shall now follow with my invisible class of Arts Book readers.

Here is a drawing, Plate 1, I have just made from a dried spray of catbrier which has hung in my study for several years. I selected it as a subject because it is practically a spray reduced to its lowest terms—lines and spots, and because it seemed to me so unpromising, so awkward in its lines and angles, that if anything beautiful could be made from it one might have hope of any spray whatever. (Of course, for a class in school I would

have the drawing without the snarl of rectangles.) Here is a right angle cut from gray paper (⌊) and another just like it making two (⌊⌉) that may be used together to give a rectangular opening of any proportion and of any size up to the limit set by the length of their sides.



Placing my adjustable frame over the lower part of my drawing I discover by experiment an arrangement which pleases me. This is done by moving the angles to make openings of different shapes and sizes, trying the opening in different positions on various parts of the drawing. I finally decide that I like best the arrangement included within the rectangle of dot-and-dash lines marked 1 in the Plate. I have traced this arrangement at Figure 1 that we may see it by itself. By hunting with my trap-frame I manage to take two other arrangements in horizontal oblongs which give me pleasure to see, those indicated by the rectangles 2 and 3 in the Plate. These are traced to make Figures 2 and 3. I hope you like them.

Let us now see why we like them. Perhaps we can find out by comparing them with other arrangements cut from the same spray, Figs. A, B, C, D and E. What is the matter with A? It lacks unity. The eye jumps from the upper mass to the lower as a caged bird hops from perch to perch. That exercise becomes tiresome after a while! C is better than A in this respect. What

is the matter with B? This lacks unity also. There are three masses which attract the eye; yes, four. The mind begins to play puss-in-the-corner at once! Three corners are full and the fourth puss is trying to exchange! Moreover, that long, black stem continually slides the eye unpleasantly over a rough diagonal of the oblong. This is as bad as D where the eye is jerked up and down over a thorny vertical diameter. The parts will not let the eye rest content with the whole. C has unity; why is C unsatisfactory? At the first glance the eye sees a dark spot strung on a horizontal diameter in the middle of a white square, all of which suggest regularity, not irregularity, the first characteristic of decorative arrangement. Besides, the spot is so solid and so small in proportion to the square that the eye has difficulty in grasping both at once. The attention is drawn to the center and then dispersed to the square, over and over. After contemplating it for a time one feels like a jelly-fish forever expanding and contracting! Not so, however, when looking at D. What is the matter with D? In D, at the first glance, the attention is caught by the extraordinary phenomena of two large, odd-shaped spaces so nearly alike that the mind begins to compare them to discover why they are not exactly alike. Of course, these two leave two other corner spaces of nearly the same area. Again the parts obscure the whole. Now when we are thinking of areas, let us review A, B, C and D, with areas in mind. In C we find two equal areas; in D two pairs of equal areas; in A equal areas above and below, and one, about equal to the sum of the two, in the

middle. All such subdivisions tend towards regularity and are therefore objectionable in decorative arrangement. But in B there is no such tendency. Here are five well-defined triangular spaces, varying greatly in area. Yes; that is the trouble with them! They vary too much; so much that the eye picks out the little one, and sets the mind to wondering why this little triangle was squeezed into a corner without its share of the spoil! In good decorative arrangement there is an ordered variety, a graduation of sizes, or as some say, a rhythm of measure, in the areas whether they be areas of background or areas of spot. This same variety appears also in the lengths of lines in the stems, and in the subdivision

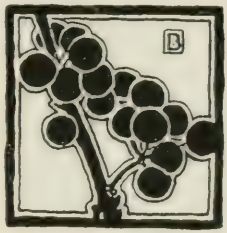
of the margin lines by intersecting lines. In C the lengths of stem are equal, and the side margin lines are about equally divided. In B, the left margin line is nearly bisected by the twig,

and the right one has an equal length set off above and below by the intersecting lines. Both C and B are monotonous in this respect. But what is the matter with E? Well, in the first place, the stem bisects the lower margin line. In the second place, the frame is too large for the subject and the mind performs as at C. Thirdly, and worst of all, the center of attraction is out of place. Every spot, line, intersection, blank space, angle in a decorative arrangement has a certain attraction for the eye, varying according to character, size, position, relation to others, etc. Some of these attractions can be measured and some cannot, but all can be felt, and all play their part in the effect. Now without giving reasons, it may be laid down as an invariable rule (with exceptions, perhaps!) that the center of attractions, the point about which they counterbalance one another, must be located on the vertical diameter of the inclosing form, and slightly above the geometric

center.* In E, the single berry happens to be where the center of attractions should be located, but owing to the large, dark mass of berries below, the actual center of attractions is at X.

12

The whole would be better the other side up. Before leaving these five bad examples, let us notice that in A the long axes of the oblong masses of spots are horizontal, while the long axis of



13

the inclosing form is vertical. Here is an unnecessary lack of harmony between the inclosing form and its content.

Now what have we learned? We have learned that in a pleasing decorative arrangement

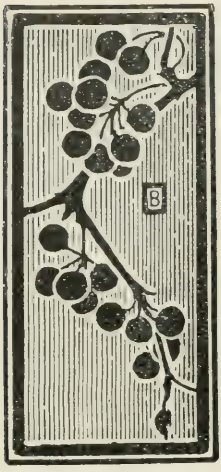
1. The principal axis of the entire mass should be parallel with the principal axis of the inclosing form.
2. That all the attractions should balance about a point on the vertical axis of the inclosing form and above its center.
3. That all the areas and lengths of line within the inclosing form should form graduated series.
4. That the "connections and placings" of all the lines and areas must be such that unity of effect is the result.

The whole matter may be stated concisely, thus: A good decorative arrangement like any other work of art is one which does not tempt the mind to analysis, but holds and entertains, and satisfies the mind with the happy interdependence of all its parts.

Returning now to our figures 1, 2 and 3, do we feel that they have Unity? That their measures in line, space and mass are varied in an orderly way? That all the attractions balance on the vertical axis and above the center? That the long axes of the masses are parallel with the long axes of the inclosing

*For a discussion of this see Year Book, Council of Supervisors, 1902, article Pictorial Composition, Bailey.

forms? If so they are not too bad, though we may wish them better. Our poor catbrier is not very graceful anyhow; but we must do the best we can with what we have.



14

Continuing our experiments with the adjustable frame, let us see what we can find to fill vertical oblongs agreeably. Figures 4, 5 and 6 are three typical results. Figure 4 is a terminal spray. In 5 two bunches of berries make practically one mass. In 6 several masses balance one another. Figures 7, 8 and 9 show similar arrangements within squares. Of course several of these might be greatly improved by taking liberties with the original drawing. In 6, for example, the first twig touching the right margin line and both those touching the left are too nearly horizontal. The upper one at the right and the lower at the left should slant downward for the sake of variety. The same twig, making almost a right angle with its stem, appears in 7 (I am afraid I have varied it a little from the original, but not enough), forming an obtrusive line. In 8 there ought to have been a berry or two on the other side of the main stem. In actual schoolroom practice such defects would be noted and remedied. Here I held closely to the original to see just what could be gotten out of it. And having done that, I discovered that by making the slightest possible variation in the thickness of stems, to reverse the apparent growth, many other good arrangements could be squeezed from this same unpromising subject, of which 10 and 11 are examples. In these the main stems make sharp diagonals with the lines of the inclosing form; but the branches furnish strongly opposing lines and the berry masses completely restore the balance.

The principles of decorative composition remain the same if the relative areas of dark and light are reversed so that dark becomes the dominant note. Figures 12, 13 and 14 illustrate

such arrangements and suggest that the possibilities of my poor catbrier are not exhausted. They show also certain variations in handling. In 12 a secondary inclosing form echoes the lighter lines within. In 13 the white spaces have been outlined. In 14 the spray appears on a ground of gray, outlined with white. While a poor arrangement cannot be disguised by clever handling, a good arrangement may often be made more attractive by it. "Fine feathers do not make fine birds"; but fine birds seldom appear in anything but fine feathers. Beauty is ever welcome.

Japanese art is responsible for decorative arrangement in American schools; but a Japanese print (Figure 15) would never yield the varied and instructive results educed from this homely native catbrier. From it I learn again the possibilities of the commonplace. Do you recall that wise word of Van Dyke's? "To be content with such things as I have, but not content until I have made the most of them."

CHAPTER XIV

NATURE DRAWING IN HIGH SCHOOLS

I

"Flower in the crannied wall
I pluck you out of the crannies,
Hold you here, root and all, in my hand,
Little flower; but if I could understand
What you are, root and all, and all in all,
I should know what God and man is."

—Tennyson.

* * * * * * * * *

"To him who in the love of nature holds
Communion with her visible forms, she speaks
A various language."

—Bryant.

HER message is the birthright of all, and it is the realization that not all have come into the full possession of it that is the inspiration of the teacher of nature drawing. The teacher's work is, first of all, to make it quite clear to the pupil who has not yet heard, that "she speaks;" second, to make plain the conditions under which she speaks; and third, in some measure to lead to an interpretation of her "various languages."

"Love is the secret of art as it is the secret of life," and it is ever the key to the beautiful. The measure of satisfaction which we derive from life is largely dependent upon our attitude toward it. The measure of joy which we experience in our communion with nature is quite as dependent upon the attitude of mind in which we consider her. Quite unconsciously we come into the possession of our habits of mind. Quite unconsciously the pupil may be led into an attitude of reverent and loving appreciation of nature, and at length into that communion with her visible forms which will make her language audible.

Then, for himself, he may discover with Rossetti, that "flowers preach to us if we will hear," and that "not alone the fairest flowers":

"The merest grass
Along the roadside where we pass,
Lichen and moss and sturdy weed,
Tell of His love who sends the dew,
The rain, and the sunshine too,
To nourish one small seed."

That nature's language is "varied" all who have heard it know, but our pupil may not. Perhaps all his life until now, to him a flower has been just a flower, and he has not thought that "flowers are words." Perhaps he has not realized that "there is one glory of the sun, and another glory of the moon, and another glory of the stars;" and that as "one star differeth from another star in glory," one flower differeth from another flower in glory. It is the poet who best has learned to catch the message of the flowers. It is he by whom their whispered secrets are best understood, and in his song he passes on to us of duller sense, the hints they give him of their subtle character. What delicacy of appreciation of the *varied* language he suggests as he tells us of the *bashful* primrose, the *timid* jasmine, *flouncing* bouncing-bet, *proud* sweet-william, the *grim* brown lichen, *gay* nasturtium, *majestic* golden-rod, *bridelike* lily, *refulgent* marigold, *vain* narcissus, sweet peas on *tip-toe* for a flight. And listen! How delicately suggestive are lines like these: "Poppies, nodding their sleepy heads," "hollyhocks smiling fearless at autumn's frost," lilacs, drooping like a wounded warrior's plume," "buttercups' faces beaming and bright," "yellow marigolds wide awake," "dandelions proud of the gold in their hair," "daisies, their white fingers half clasped in prayer," "meek faced anemones drooping and sad,"

"The lupin here,.....
Low droop their sorrowing leaves,
And close their humid eyes."

"The tall white rue stands like a ghost
That sighs for days departed."

We shall not have completed our task until our pupil, like

> "The poet, faithful and far-seeing,
> Sees alike in stars and flowers, a part
> Of the selfsame universal being,
> Which is throbbing in his brain and heart,"

a being so changeful, so varied and so delicately organized that he himself knows that not the whole range of language can give it adequate expression. The high school pupil can never fully express himself. His power to appreciate is vastly greater than his power to express. When he has come to know what nature holds for him, who can say but he, American that he is, may find that she is offering him a new form of expression of which he has not dreamed. Had the dreamy, mystic East been his home, instead of the wide awake practical West, he would have known that in his land "they talk in flowers," weaving of bud and leaf and petal garlands of thought, fraught with loves and cares, and so arranged as "to work out choicest sentences." But he is a child of the West and little does he know of the flowers as symbols of thought. Yet suppose he knew and understood the accepted meanings of the forms which he paints, arbitrary though symbolism sometimes may seem, would he not paint them better? Would he not look with more intelligent interest for the elements worthy of emphasis? Would he not be more alert to catch nature's own suggestions and better prepared to hear her voice? Let us tell him all we know of the meaning that others have read in nature's forms, and by doing so wake the sensitiveness to suggestion which must ever dominate the mental attitude of him who would hold communion with her.

Does the pupil in our high school class paint mechanically? Is his highest aim to reproduce color and form? Does his work lack feeling? Has the teacher who has found it so let the poets help her? Some day this fall when your class is painting from the mullein, read to them as they paint, Theron Brown's "Mullein" and note the result. Or when you have with you those "blind little beauties of the wayside" read aloud his "Closed Gentians." When your room is gay with nasturtiums, read Helen Hunt

Jackson's "My Nasturtiums," and some day before it is too late to find the flowers, read her "Song of Clover." Of course you will not forget to use the "Fringed Gentian" by Bryant, nor "Sea-side Goldenrod" by Celia Thaxter, and when the frost opens the "velvet pouch," and the autumn wind scatters the "fairy fabric" you will remember Ray Lawrence's "Milkweed." And as one by one the flowers come and go in long succession as the seasons change, you will find use for such verses as these, and many more: "The Painted Cup" by William Cullen Bryant; "Daisies," Bliss Carman; "The Wind-flower," Lucy Larcom; "Hepatica," Isaac Bassett Choate; "Jack-in-the-Pulpit," edited by J. G. Whittier; "Daffodil," William Wordsworth; "To the Dandelion," James Russell Lowell.

Snatches of song about the flowers you will find in abundance in Shelley, Shakespeare, Keats, Burns, Bryant, Lowell, Tennyson and Wordsworth. Sometime when you know in advance the flower that you are to use in class, spend a little time in the library, and see how many times you can find its messages in verse, and bring to your class the results of your search. Do you fear that they will be unresponsive? Try it and see.

"Flowers have an expression of countenance as much as men or animals. Some seem to smile; some have a sad expression; some are pensive and diffident; others again are plain, honest, and upright, like the broad-faced sunflower, and the hollyhock."

—Henry Ward Beecher.

II

IN all art work, appreciation and a desire for expression are all-important and co-ordinate. This is particularly true when nature furnishes the subject. For this reason, whenever it is possible, let the subject be one of the pupil's own choosing. The high school pupil should be able to make an intelligent choice, and can usually be relied upon to bring to the studio such material as can be used. He may not choose wisely at the beginning, but let him paint for a few days from subjects carefully chosen by the teacher, whose experience has proven what is best,

and he will gladly suggest and willingly go a-searching for material which he thinks he can secure.

Usually the larger forms will serve us best. This is true not only because they demand the breadth of treatment which is the ideal toward which we are working as regards technique, but also because they demand a breadth of thought as well, and a mental grasp of essential characteristics which leads to an appreciation of and a regard for the "spirit" rather than the "letter." This leads very directly to interpretation of character, and then it is but a step into the realms of idealization. Such subjects as the following are good ones for the autumn work; the aster, the canna, the gladiolus, the golden-rod, the hollyhock, the cosmos, the sunflower, the squash blossom on the vine, the mountain phlox, the sumach, fruit on the branch, the cat-tail, and the mullein. These are far better than the forms of smaller growth.

Nature work, if it is to be successful, must interpret nature. Because this is true, care should be taken in selecting the specimen from which the work is to be done, that it be the one that shall best tell the story of the plant or of the flower. Individual characteristics must be recognized and the selection made with a view to emphasizing them. Again nature work,—indeed all art work if it be art at all, must aim toward the achievement of beauty. Because of this the specimen which is not only most characteristic, but also most beautiful, should be chosen.

But the subject matter, although it is an important consideration, is not the only one of importance. The manner of presentation is perhaps quite as important. How may we guide the pupil so that he shall lay hold upon all that the bit of nature from which he is to work holds for him? And how shall we help him to record in color and in form his response to its influence? Shall we point out the charm of color and of growth? Shall we call attention to the subtlety of line, and to the delicate poise of bud and flower on stem? Or, instead, shall we allow the pupil to discover the beauty of the form for himself? Do we expect him to discover unaided all the charm of suggestion in the work of Shakespeare, or Macaulay, of Milton, or of Chaucer, with which he deals in his study of literature? Surely not.

The cosmos. A drawing in body water color on a brown ground.

Why then should we hesitate to point out all the beauty we can? There will be enough left for him to discover, and because he sees with other eyes than ours, he will find in nature what we perhaps should never see.

It is just here that we can call the poets to our aid, for they have told in song far better than the most of us can ever hope to tell, the individual charm of many a flower. Sometimes a little snatch of poetry repeated or read aloud, gives in a flash the character of the subject, and is an immense stimulus to the imagination and to independent thought.

When the character has been studied, and the pupil is ready to paint, always the first thing to consider is wherein the greatest charm of the subject lies, whether it be in loveliness of color, in beauty of line, or in distinctiveness of growth. This will at once determine the placing of the emphasis. Sometimes it is well to concentrate the thought upon *the one*

element of beauty, to the exclusion of every other. If the subject be one in which the greatest interest lies in the color, forget to draw, and without a thought as to form, blot in the color with perfect freedom, making trial after trial, until the color satisfies. If it is possible, continue the study and when the color has been grasped, work toward truer form, but if the time is short, do not be disturbed if at the close of the lesson you have only a series of color blots, if the color is *true*. If the chief beauty lies in the form, study again in the same exclusive way, using pencil, brush and ink, or monochrome. If the massing is worthy of special study, try working in silhouette.

When time will allow it, the final sketch may well be preceded by a series of these preliminary sketches, in which one phase at a time is emphasized in studies which preclude all thought but that of the one feature of interest.

Most pupils need to be made acquainted with the possibility of idealization. There is always the danger of being too literal. Yet there is always the possibility of modification without interference with the expression of character. Ever the goal should be the beautiful, and ever the approach must be made from the standpoint of the ideal. Unguided, the pupil will always paint what he sees. Let him once grasp the thought that it would be better should he paint what he *wishes he might see*, and at once he will begin to idealize, and we shall begin to reap a harvest of beauty.

If there is sensitiveness to the appeal of the subject, and keen delight in the work, technique will in a large measure take care of itself. Facility will be developed by experience. The joy of painting from a lovely form should never be lessened by the thought of how to do it. To the best result the consideration of size and position of paper, the choice of an inclosing space and the placing of the form within it, is of course essential. All this, however, should be so inwrought in the daily practice of the high school pupil, as to be habitual and sub-conscious. To him the all-absorbing consideration should be the interpretation or the translation into pencil or pigment of a subject which

affords genuine delight. As often as possible the pupil should be allowed to select his own medium, and given absolute liberty as regards treatment.

Often there is nothing else that a teacher can do that will help her class as much as to sit down and work among them. The inspiration that comes from watching another paint is sometimes worth more than any amount of correction or criticism. Snap, spirit, directness of expression, crispness of treatment, delicacy of feeling, sympathy,—these are contagious. They may be caught when they cannot be taught. That which is a delight to the doer is ever a delight to the beholder, and the eagerness with which the work is watched, when the teacher who loves it paints or draws among her class, is in itself so great that as she works, she *cannot help* teaching.

III

JOHN RUSKIN tells us that "composition means, literally and simply, putting several things together, so as to make *one* thing out of them; the nature and goodness of which they all have a share in producing." How simple and yet how fundamentally true in all its applications, whether the composition be a symphony, a poem, a novel, a drama, a cathedral, a statue or a painting. Never better than in our study of composition can we teach the unity of the arts and their dependence upon common fundamental principles.

That the teaching of composition should be made as simple as possible goes without saying. Perhaps we can do no better than to hold to the two laws which Ruskin's definition suggests: first, unity; and second, the interdependence of composite parts. In any case we may safely subject whatever we teach to the test of these two indispensable and coördinate principles.

A most suggestive method of presenting this subject is that of working before the class, allowing the pupils, so far as possible, to dictate the composition, step by step. Let us start with an upright rectangle of ordinary proportions, which shall serve as the inclosure which our composition is to fill. Our first con-

sideration must be the placing of the most important mass. We know that the eye craves support for that to which it is attracted. It travels to the upper part of the figure when we approach a person on the street. It is drawn to the eyes when the face alone is considered. It is best satisfied with the letters of the alphabet when they are so proportioned that the center of attraction is above the geometric center. It inevitably ascends to and rests upon the upper part of the bell tower or the shaft of granite. It looks to see pictures hung against the upper half of the wall. Naturally then we decide to place the mass "a" a little above the center of our space.

Shall we now give the mass a definite form and call our picture finished? Preferably not. In the novel our interest is with the heroine, yet we should tire of hearing of her and of her alone. Additional characters must make the narrative complete. Doubtless additional masses would improve our composition. But if we add them what shall be their relationship to the first? In the novel there is but *one* heroine, even though there may be other characters. In the drama there is the *one* leading part. In the symphony there is *one* theme though there may be many variations upon it. Domination always implies subordination. In our composition then, whatever else we add, we will see to it that it is kept distinctly subordinate to our first mass, in both size and position, lest the masses challenge each other. We will strive to so relate the subordinate masses "b" and "c" that the eye, having made occasional excursions to other parts of the picture, will inevitably return to and rest contentedly upon the dominant mass "a." Moreover, in deciding upon the placing of the subordinate masses we will remember what experience has taught us regarding balance.

As yet we do not know the subject of our composition. We may imagine "a" to be the foliage mass of a wide-spreading oak, "b" a boulder, and "c" a cloud. Or "a" may be a witch of Haarlem with her cap and crumpled ruff, "b" her hand and stein, and "c" the owl. Or the whole may be a flower composition. For convenience, we will make it the latter. Of "a"

Sketches showing progressive stages in the decorative rendering of the nasturtium. The final stage is shown on the next page.

we will make a nasturtium against one of its pad-like leaves; "b" we will make another leaf, and "c" a bud. Now we shall

D
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need some stems. Nasturtiums are sometimes erratic in their growth. We may then let the stems be represented by the lines

A decorative arrangement from the chrysanthemum, by a high school pupil.

in "B", and keep well within the range of possible growth. We agree that the result of this and other like experimental arrangements is disappointing. The only satisfactory placing of the stems is one which brings them into such agreement with each other and with the principal line of the inclosing space, that the movement of the whole is unified. "C."

As we have worked we have recognized three important considerations: first, domination; second, balance; and third, consistency of movement. Perhaps in the beginning we need mention no more. Underneath them lie Ruskin's two laws of unity and interdependence. Many are the terms which we might employ, but the fewer we teach the better. Variety, contrast, distribution, repetition, gradation, radiation, opposition, and all the rest may be explained by use of examples, but be kept incidental.

It is not possible to achieve anything of real value in composition until one knows the difference between a good line and a bad one, between a beautiful form and an ugly one, between a distinguished arrangement and one that is commonplace. Sensitiveness to all of these things is developed through frequent contact with the fine, and through practice. When the composition has been planned, blocked in, and criticised, it should always be studied part by part with the purpose of bringing into every line and shape that for which art exists,—Beauty (D). The gentle flow of shape into shape, the cunningly arranged continuation of line, the subtlety of beautiful proportions,—these are things for which the teacher can suggest no rules, but sensitiveness to them may be acquired, and not until it has been can we hope for beautiful compositions.

CHAPTER XV

ANALYTICAL STUDY OF PLANTS

(Translated from the French)

IN CREATING a decorative work the artist most often draws his inspiration from Nature; interpreting her forms and translating them into his chosen medium of expression,—bronze, enamel, the precious metals, wood, textiles. The interpretation varies in each case; since the character of a work should develop largely from the logical use of material. But always and whatever may be the manner of interpretation, the material employed, or the conception, the rendering must be preceded by a thorough study of nature: that is, by the synthesis of an analysis.

We are not able to reproduce the forms of nature with all their admirable qualities of logic, grace and strength. Therefore our highest ambition should be, after having apprehended them as fully as possible, to adapt them preserving all of their charms that lend themselves to transmutation into the desired medium. To attain even this result requires much effort. We must, as we have said, apprehend the construction, the constitution of the plant, not only that of its exterior forms, but also its internal and hidden characteristics, for upon these latter the exterior forms depend. But, it may be questioned, is not a good photograph the best record of observations, the most faithful, the most precise? It may be answered that photography can and does render good service in this department of study, showing us the actual plant as it appears in life, with its grace, its delicacy or its strength; but in spite of its accuracy, however great that may be, it cannot take the place of a record of observations. Again, there are two kinds of records of artistic observation, the picturesque and the analytical. Let us consider each.

We see a branch of eglantine, graceful in curve, elegant in bearing, thickly starred with blossoms. Of this we make a

sketch, a drawing, or a water-color, according to the time at our disposal. The result is a picturesque record. This we subsequently use; either by copying it directly, or by modifying

it slightly; adding or suppressing a few blossoms, or yet again changing the curve of a branch. But possessing only this picturesque record, we are restricted. In spite of all efforts it remains our original branch of eglantine. We are unable to obtain from it a new motif, for the very reason that a picturesque record does not and cannot afford us adequate information regarding the vital structure of the plant.

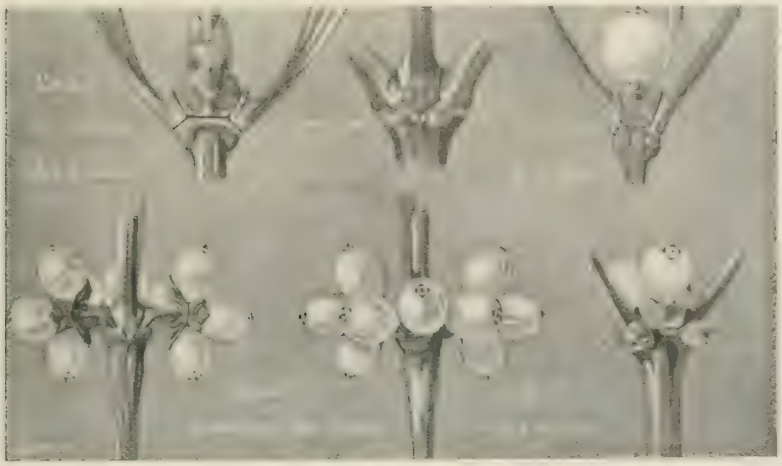
The analytical record of observation, it must be confessed, is less attractive in appearance, and offers to the non-professional person but an indifferent degree of interest. As its name indicates it presents a complete analysis of the plant; it is a study of the arrangement and constitution of the component elements, and of the system of juxtaposition governing them. From this explanation one might infer the analytical method of study to be difficult and complicated, but in reality it is very simple, as we may learn by following its processes logically, that is, step by step. First of all, we should consider the character and what we may call the general bearing of the plant; for, from as great a distance as we are able plainly to see it, we note the forms and the other qualities which distinguish it from other natural species; we recognize its individual bearing and profile, the oak widely differing in these respects from the beech, and the poppy from the convolvulus. We note, therefore, the individual profile or silhouette, and certain relations of mass which may be interesting and important; for instance, the volume of florescence presented by the lily relatively to its whole. It is needless to say that these notes differ, according to the nature of the plant. Thus, the lilac and the elderberry, as well as the horse-chestnut, permit us to recognize in the massing, the system of grouping prevailing in its manner of inflorescence, and this so perfectly that if we thoroughly study the system, we can by means of simple silhouettes give to the plant its special, individual character. For example, we observe that the clusters of the lilac are massed together, while, on the contrary, the floral pyramids of the horse-chestnut occur in isolation. Again, the elderberry is starred with white masses of bloom whose disposition upon the branch differs greatly from the two preceding systems.

The first stage of our study is now complete. We have rapidly observed the plant from a distance and seized its salient characteristics. Now approaching it more closely, we begin our analysis proper; studying the elements of the plant, and the laws which govern their juxtaposition; finding each natural family ruled by principles peculiar to it, which it must be our

purpose to understand. We study in turn the various parts of the plant,—the root, the stem, the leaves, the inflorescence, the fruit; examining these details both in themselves and in their reciprocal relations. We also follow the growth and progress of the plant; as, for example, the successive transform-

ations of the horse-chestnut bud, which bursts and gradually develops the leaves; providing thus the material for exquisite floweret motifs. Again, from the architectural study of the articulations and the insertions the trained eye receives structural suggestions which may find direct application in goldsmithing, in wood, and in iron, even in the building art. Then, advancing a step farther, we discover by making cross sections of the stem, of the fruit, of the blossom, or of parts of the latter, such as the ovary, the closest secrets of the interior construction which are abundant sources of manifold ornament.

It is plain that the resources of this method are infinite, and to be developed they need only the application of logical study. A picturesque sketch will give further information as to the attitude and bearing of the subject and the system of grouping which it observes, while a water-color will provide evidence regarding the principal color tones of the plant. At the end of such an analysis we should be so intimately acquainted



with our subject as to be able to reproduce it from memory, unaided by the studies thus multiplied, which will serve to supply elusive details. We shall possess then perfect freedom in composition, together with great fertility of invention, and pliancy of imagination, enabling us to construct our own design according to our fancy but in a rational manner, upon the solid basis of the constitution of the plant itself, differing thus radically from the artist who is condemned endlessly to copy his picturesque study.

It may be objected that the processes just described are long, while the time at the disposal of artists is short, necessarily; that, for this reason, taken often unawares, designers are happy

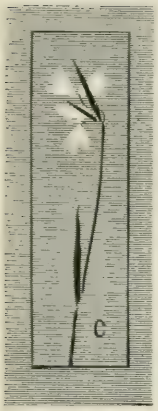
to find notes capable of supplying the place of studies which they have not been able to make, or cannot at the moment produce, either for want of time or because the season is unfavorable As a principle it may be stated that no study is comparable in value to an original one; that nothing can be substituted for indications gathered from the scrutiny and the careful analysis of nature.

The Plates illustrate the methods of study which we advocate. The designer, if he follow the indications therein given, will accumulate an artistic capital from which he may draw accurate knowledge of nature in winter time or in isolation.

Rendering in water color of a spray of grape. By Percy D. Spaulding, Grade VIII, North Scituate, Massachusetts.

CHAPTER XVI

PLANT DRAWING BY CHILDREN



ONE secret of securing good results in teaching children to draw from plants is in the choice of paper. If the flowers or the seed vessels of a plant are white, a rather dark toned paper will give a background against which the light elements and the dark elements will show equally well, as shown at C—Chinese white mixed with the colors will give light, opaque tones. If the flower masses are a very light and brilliant color, as for example, in the golden-rod, gray is not a good background. The drawing is more likely to come out well on a white or cream-white ground, as suggested at D. The original of this drawing was practically a silhouette of green, with touches of yellow to suggest the flower.

The sheets reproduced on page 130 show two treatments of the drawing with reference to its background. In the first the whole rectangle is considered as the background. This is allowable when the object is rather attenuated, spread abroad, erratic in growth, and when the whole must be shown. In the second, E, the inner rectangle is considered as the background and the lighter portion beyond it as the mount of the picture. In such a case the drawing may more solidly fill the background. A drawing in which the coloring is too light or too dark, or off color a little, may be made to appear more nearly correct through the careful selection of the mount. A dark mount makes a drawing look lighter; a light mount

makes a drawing look darker. A mount having a positive hue, as green or brown, tends to strengthen the effect of the complementary color in the drawing. As a rule the mount

Brush drawing, yellow lily, by Barbara Walker, II, Normal Model School, Fitchburg, Mass.

E—Water color drawing from the bloodroot by Isabelle Woods, V, Groton, Mass.

should harmonize with the drawing, that is, echo in some way a prominent color of the drawing.

On page 131 are reproductions of two upper grade drawings. The first, without a mount, is an admirable brush drawing from a tulip. The handling is direct, full of life, and reflects close observation. The sheet has been trimmed a little too closely

G—By Hilda Dearing, VI, Braintree, Mass.

O—By Hazel Spooner, VIII. Southampton, Mass.

Decorative silhouette. A spray of barberry by a ninth grade pupil, Newton, Mass.

on the left side; otherwise the arrangement is good. In the second drawing, the arrangement within the rectangle is as good as children can be expected to make. The echo of the dark tone of the plant in the mount adds to the harmony of the whole by distributing the darks throughout. The tone of the flowers was produced by removing a portion of the background with a knife or rubber.

The drawing of the spray of barberries, by a ninth grade pupil, was achieved with a brush and common writing ink. It evinces close study of the original, a judicious use of the white line to indicate veins (after the manner of the Japanese), and a

Decorative panels from leaves. By grammar grade pupils, New York City.

A—Sprouting corn. Brush drawing by Master Walter Perrault, I, residence not given.

L – Pencil drawing of wild carrot by Elizabeth Kerwin, VIII, Woonsocket, R. I.

skilful balance of masses within the oblong. The main line of the stem has a fine vigorous curve, and is well placed.

The three panels with leaves were made by grammar school pupils in New York City. They show a thoughtful relation of stem line to inclosing form, curved in the circle, angular in the rectangles. The masses in each case are well disposed with reference to the vertical axis. The treatment is more pictorial than in the previous plate. The little artists have been influenced by the light and shade of the original sprays.

The smaller drawing on page 133 shows an ideal directness in handling. Every stroke is evident, every one counts; no correcting or overlaying of color detracts from the crisp freshness of the effect. The larger drawing in pencil is no less direct and forceful. Not only is the growth well interpreted, but the colors of the original are suggested by the careful rendering of the lights and darks.

The drawings reproduced on page 135 were made by upper grade pupils. They exhibit unusual skill in selecting the specimen, in placing it within the rectangle, and in rendering the parts to give unity of effect. In the twig of red maple, J, the vigorous upward and outward movement of life in the spring is admirably suggested; in the sumach, the stress of the fall weather, the effect of frost and wind on a still vigorous spray, is no less admirably shown. The originals exhibited good harmonies of color; the one bright and fresh in hue, the other deep and rich.

The four panels on page 136, show four arrangements of the same spray. That in the circle was made by George Sauter, Turners Falls, Mass. The others were discovered within it by means of the L finders, as described in Chapter XIII.

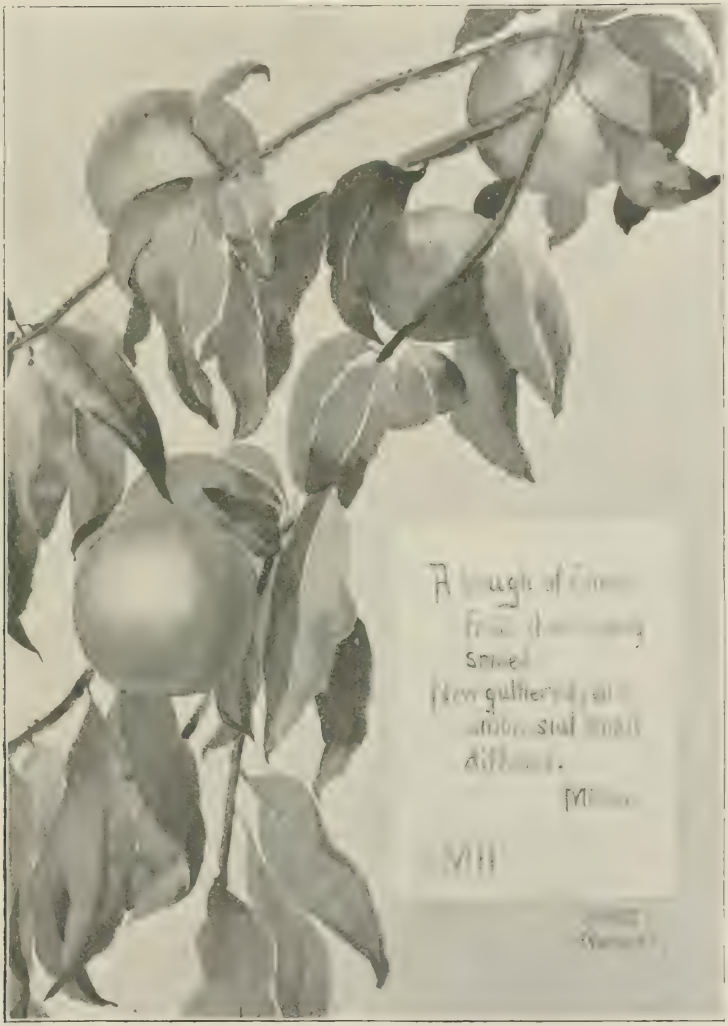
The plates on page 137 show an excellent pencil drawing of a fruit spray, and its interpretation as a decorative arrangement, by William Valgren, VIII, Fitchburg, Mass. Better work than this can hardly be expected from pupils in the grammar school.

The drawing reproduced on page 138, a spray of milkweed, was made by a pupil in the Salem Normal School. The original

J—Maple spray. By E. P., VII, Orange, Mass.

N—Sumach spray. By Grace Wheeler, VIII, Braintree, Mass.

Decorative arrangement of a spray of oak. By George Sauter, VIII, Turners Falls, Mass. Three other panels from the same spray.



was in water color. It shows careful study of the anatomy of the plant, good judgment in composition, and skill in handling. The autumn feeling is certainly reflected in this drawing, unusually successful in its suggested light and shade.

The bough of the peach tree on page 139 is also by a pupil in the Salem Normal School. How well the autumn burden is suggested! One feels the droop of the leaves and the weight of the fruit. The handling of the water color is worth careful study. Each touch is individual, definite, graded throughout (while wet), and all are in such relation to one another that the whole is a unit.

The color plate from the grape, opposite page 128, reproduces in fac-simile a drawing by Percy Day Spaulding, VIII, North Scituate, Mass. As a water color drawing directly from the object it is admirable from every point of view. The arrangement within the rectangle would have been more pleasing had the center of interest been somewhat higher.

The color plate at page 140, reproduces a decorative arrangement from a quince spray by David Gwillow, IX, Westfield, Mass. It shows what the art critics describe as "feeling" and "tone." In other words, all its colors have a certain warm hue in common, the yellow of the fruit, the brown of the stem, the light and dark green of the dry leaves, are all affected by the same hue, neither orange nor pink but a combination of both. The result is a piece of decorative coloring, unusually good, considering the age of the pupil.

In decorative coloring all the tones participate in some common quality without losing their individuality of color. The Chavannes decorations in the staircase hall of the Boston Public Library are supreme examples. In these grass is green and skies are blue, rocks are brown or gray and temples and clouds are white, but nevertheless all the panels are blue-violet in hue, in perfect complementary contrast with the Siena marble of the walls.

Decorative arrangement from the quince. By David Gwillow, Grade IX, Wakefield, Mass

CHAPTER XVII

INTERPRETIVE PLANT DRAWING

EVEN the simplest plant is so complex in its elements of beauty, that not all can be expressed in any one medium at any one time. Selection is necessary and desirable. In the teaching of children the fewest possible number of elements should be studied in the beginning, and these should be expressed in the simplest possible way.

The essentials of form can best be expressed in silhouette. Figure 1 shows what the essentials are in a spray of oat grass, and how simply they may be represented with the brush. Figure 2 shows the completed drawing well placed within a rectangle. The same method has been kept in mind in the drawing of the spray of bayberry, page 143. Notice particularly the articulation of part to part, and the sure rendering of foreshortened parts.

Silhouettes need not necessarily be in black on a white ground. An outdoor effect may be suggested by using a background of green or blue or violet; an indoor effect by using a red, an orange, or a yellow ground. The silhouette may be drawn in color—a color characteristic of the subject, or a conventional color. The Plate opposite page 142 is from a drawing made before a class as an illustration of the color possibilities of the silhouette, by Ernest A. Batchelder.

Logically, the next step is the interpretation of the plant in two flat tones. This is undoubtedly the best method for first work representing the perspective effects presented by foreshortened leaves and flowers. The drawings on page 144 show the use of two tones, one for the upper side of the leaf and one for the under side. These are brush drawings by Walter Sargent.

Two or more flat tones are often effective in the rendering of a spray decoratively. In such cases the tones should be care-

Oat grass. Silhouettes by Walter Sargent.

fully adjusted in relation to each other. The grape panel is an illustration of this use of flat tones. It is a wash drawing by Henry T. Bailey.

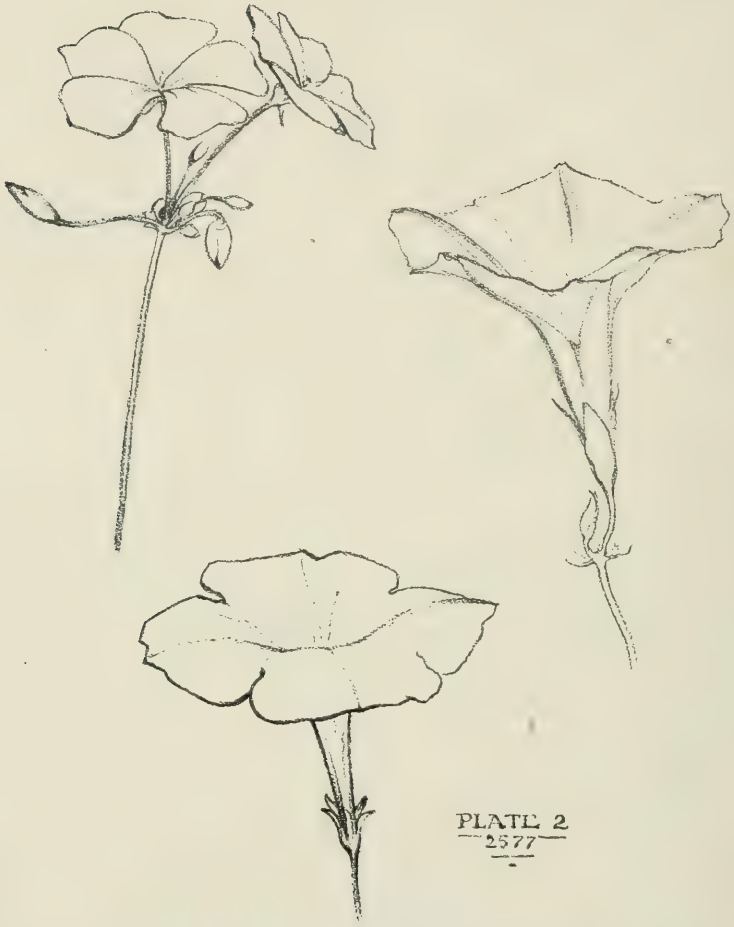
For provoking close observation, for recording the facts of structure, and the delicate freshness of the living plant, no medium is superior to the lead pencil. The three Plates which

A decorative arrangement from the chrysanthemum.
By Ernest A. Batchelder.

Bayberry. A silhouette by James Hall.

A spray of grape. A decorative arrangement in related values. By Henry T. Bailey.

Common leaves. Pencil drawings by Walter Sargent.



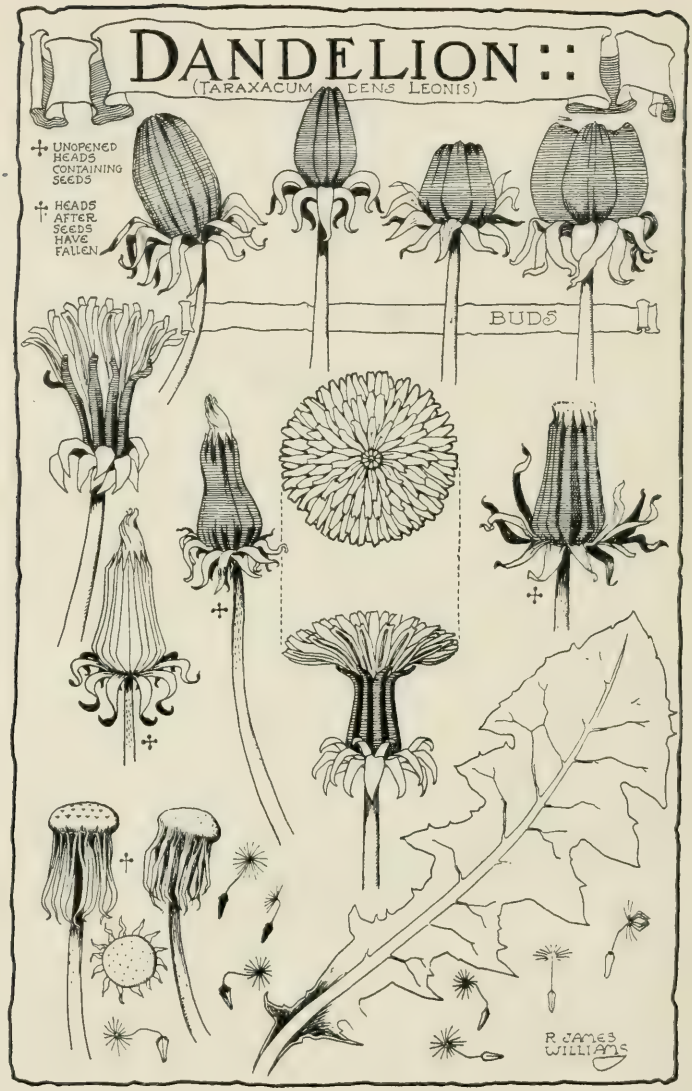
Common flowers. Pencil drawings by Walter Sargent.

False hellebore shoot. A pencil drawing with a wash of color.
By Henry T. Bailey.

A stalk of milkweed. Outline drawing with a wash of color. By James Hall.

An analytical study of red clover. In outline and wash.
By Henry T. Bailey.

Analytical study of the dandelion. Pen drawings by James R. Glenn.


DANDELION ::
(TARAXACUM DENS LEONIS)
UNOPENED HEADS CONTAINING SEEDS
HEADS AFTER SEEDS HAVE FALLEN
BUDS
R. JAMES WILLIAMS

2555

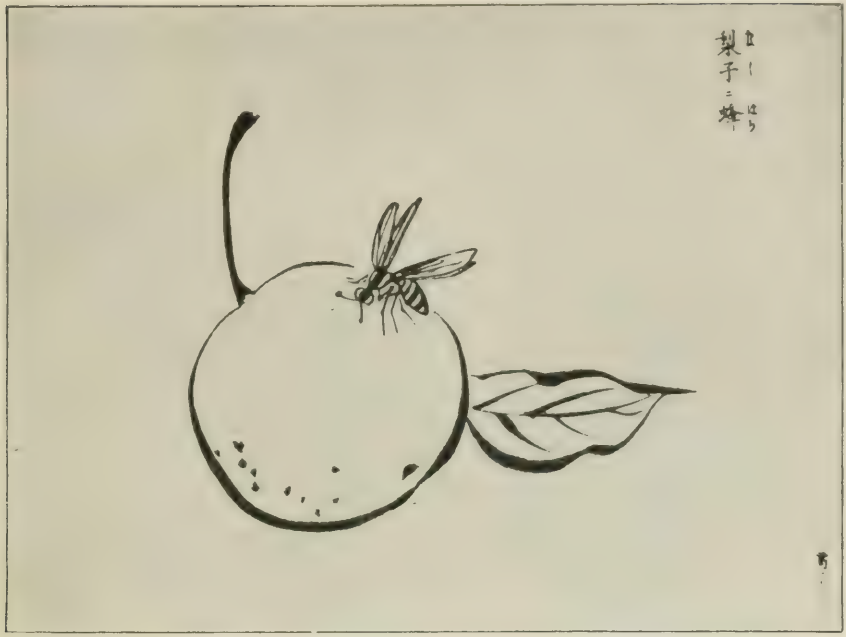
follow show leaves and flowers of various kinds, admirably rendered in pencil by Walter Sargent. Notice the variety in the line, and how it is used to express varieties of substance in the objects.

After a form has been carefully rendered in pencil, a wash of color is sometimes desirable to suggest an added truth of relative values or of light and shade. Such drawings are shown on pages 148 and 149. The hellebore was drawn as a record of the amazing assemblage of vigorous curves the early shoots of this athletic savage of the woods offers to the eye. The wash of color was added to emphasize the effect of reënforced solidity which the plant has as a result of the crowding together of its plaited leaves.

The milkweed was drawn to express in the simplest possible way, the sturdy growth of the plant, as it appears in the fall, having survived the ravages of the summer. It is a veritable tower of strength in the plant world; and this character is well expressed in the drawing.

In the analytical study of a plant the medium used should depend upon the parts to be represented. But here, again, there is no more widely useful medium than the lead pencil. The drawings from the red clover are for the most part in pencil. That which shows the sweep of growth in the whole plant is done with the brush. Wash has been added to the pencil studies in several cases, to record more easily changes in color which may be suggestive to the designer.

After some degree of skill has been attained, and drawings can be made with assurance, the pen is a good medium. With



An apple. Drawn with brush outline. By a Japanese artist.

it the minutest details of structure may be recorded. The Plate on page 151 contains pen drawings by James R. Glenn to meet the requirements in a class in design under Dr. James P. Haney. Another study of the dandelion is shown on page 152. Pen drawings by R. James Williams of England. Another example of the good work of this man is shown on page 153, a drawing from the cowslip or marsh marigold. Notice the effective use of lines of varying thickness, and the very sparing use of light and shade.

The pen is especially valuable in the rendering of such details as buds and seed pods, parts exhibiting sharp, refined contours, and delicate but significant modelings of surfaces, such as may be seen in the drawings reproduced on page 154. Pen drawings of seed packs, by Henry T. Bailey.

A spray of grape. Drawn in wash with a strong brush outline. By a Japanese artist.

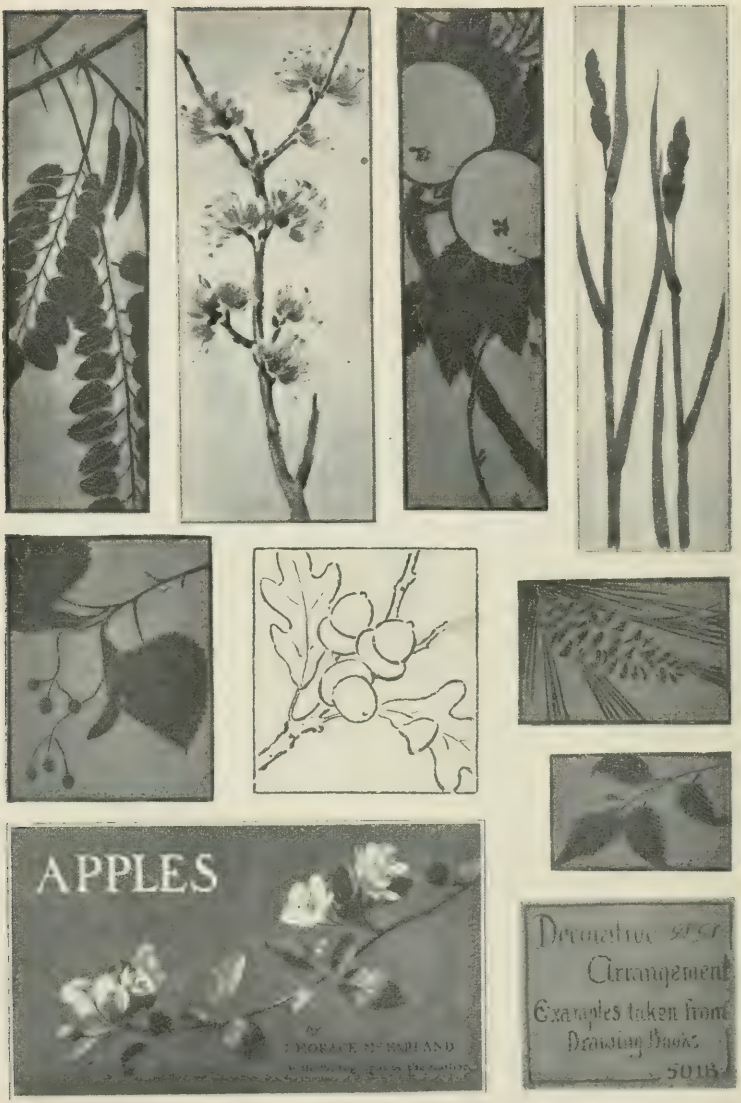
The brush is an implement with great possibilities, especially in the hands of a master. It will produce the utmost of variety in a single outline, in the hands of a Japanese artist, as the drawing on page 155 suggests. When a drawing requires a strong outline to bind all its parts together and to give a decorative character to the whole, the brush outline is perhaps the best possible. As an example of such treatment see the illustration above. This illustration and the previous one were taken from Japanese drawing books, handled in this country by Bunkio Matsuki of Boston.

The other Japanese Plates (pages 157 and 158) are examples of that perfection of technique, that precision of composition,—absolutely adjusted in its diverse attractions, and in its space relations, yet apparently perfectly free,—and

Jack-in-the-pulpit. A brush drawing in two conventional values.
By a Japanese artist.

Wistaria spray and finch. A brush drawing in several values.
By a Japanese artist.

Examples of good decorative arrangement.



Examples of good decorative arrangement.

that charm of effect of life, for which Japanese art is justly famous.

The Plates on pages 159 and 160 show good decorative arrangements from plant forms, in various styles of treatment. These were brought together from three sets of drawing books, The Prang Textbooks of Art Education, the Parallel Course Drawing Books, and the Applied Arts Drawing Books. They show many happy compositions of line and of notan.

The final Plate is a fac-simile reproduction of a drawing in pencil and water color by James Hall. It shows the ideal towards which instruction in Nature Drawing should tend from first to last, – a drawing which interprets as fully as possible the vital character of the beautiful original.

So fair, so sweet, withal so sensitive,
Would that the little Flowers were born to live,
Conscious of half the pleasure which they give;

That to the mountain-daisy's self were known
The beauty of its star-shaped shadow, thrown
On the smooth surface of this naked stone!

And what if hence a bold desire should mount
High as the Sun, that he could take account
Of all that issues from his glorious fount!

So might he ken how by his sovereign aid
These delicate companionships are made;
And how he rules the pomp of light and shade;

And were the Sister-power that shines by night
So privileged, what a countenance of delight
Would through the clouds break forth on human sight!

Fond fancies! wheresoe'er shall turn thine eye
On earth, air, ocean, or the starry sky,
Converse with Nature in pure sympathy;

All vain desires, all lawless wishes quelled,
Be thou to love and praise alike impelled
Whatever boon is granted or withheld.

—Wordsworth

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B2 NATURE DRAWING
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